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ABSTRACT

GRADES OR AGES: Mentally handicapped children. SUBJECT MATTER: Physical education. ORGANIZATION AND APPEARANCE: The guide is divided into two parts. Part One discusses physical education, its philosophy and purposes, characteristics of sound programs, and recent trends; mental retardation and characteristics of retarded children are reviewed. Part Two discusses fundamental movement patterns and motor skills in terms of behavioral objectives, common deviations to watch for, and suggested developmental activities to use in patterns or skills at each level. Part Three includes practical games, sports, and recreational activities in which the patterns and skills discussed in Part Two can be used. OBJECTIVES AND ACTIVITIES: In Part Two, behavioral objectives are listed and outlined for each skill or pattern, and activities are suggested. Part Three outlines certain sports and activities as they reflect skills and patterns of Part Two. INSTRUCTIONAL MATERIALS: Required equipment is listed in activities descriptions. An annotated bibliography is included as an appendix. STUDENT ASSESSMENT: No provision indicated. OPTIONS: No other possibilities other than those of the text are indicated as acceptable. (Author/JA)

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Physical Education Curriculum for the Mentally Handicapped

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Manitowoc County Handicapped Children's Education Board
Henry Donatell, Administrator

with funding granted through Title VI-B
Education of the Handicapped Act project no. 10062
A Comprehensive Curricular Approach to Physical Education Programming for the Mentally Retarded.

Manuscript prepared by
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Foreword

This new curriculum guide was developed during a period of two years of intensive effort under the leadership of Manitowoc County Handicapped Children's Education Board Special Education Director Henry Donatell, his staff and consultants. The Division for Handicapped Children is pleased to make this utilitarian product available to all teachers and others concerned with the education of handicapped children. The format of this publication is consistent with the Department of Public Instruction's persisting life needs approach to the educable mentally retarded in the area of Wisconsin education. The superb cooperation that our agency received from the Manitowoc County Handicapped Children's Education Board staff is excellent proof of the continuing partnership between state and local educational agencies on behalf of children with special needs.

We sincerely hope that each of you using this publication will modify it to fit the unique needs of the children you serve. Any tool such as this must be used as a guide and not as a hard and fast formula. Any suggestions you have for the further improvement of these empiric resource guides should be referred to Mr. Victor Contrucci, Mentally Handicapped Section Chief in the Division for Handicapped Children.

John W. Melcher, Administrator
Division for Handicapped Children

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This curriculum guide was developed at Riverview School, Manitowoc County, upon authorization by the Manitowoc County Handicapped Children's Education Board. Donald G. Voss, Physical Education Director at Walworth County Special School, developed the manuscript with the assistance of Mrs. Carol Lisdahl, physical educator at Riverview School. Sheboygan County Special School conducted the companion project of this Title VI-B Project.

This project was developed in cooperation with the State Educational Agency Title VI-B, Education of the Handicapped Act project "Implementation of the State Curriculum for the Mentally Retarded."

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Introduction

Overview of the Title VI Project

This entire project was made possible through Title VI-B funds (P.L. 89-750) of the Elementary and Secondary Education Act of 1965. Cooperating in the first two phases of the Project were the Sheboygan County School for Special Education, Sheboygan Falls, and the Riverview School Manitowoc County.

Phase I of the project involved a six-week summer school program during the summer of 1970 at the Sheboygan County School for Special Education entitled "Physical Education Practicum Experience Teaching Retarded — Phase I — Summer School." Phase I was designed:

1. To provide the intern physical education teachers with the practical experience of teaching mentally retarded youngsters in the area of physical education and recreation.
2. To provide a state university-affiliated formal training program for the intern physical education teachers to meet the licensing certification standards of the Wisconsin Department of Public Instruction.
3. To help retarded participants of the Phase I summer school session in discovering enjoyable recreational activities with a resulting releasing of tensions and frustrations.
4. To examine growth in physical fitness, as measured by the Special Fitness Test, resulting from a directed and intensive physical education program.
5. To determine the content of an adequate physical education program designed specifically for the retarded and to develop behavioral objectives for the various aspects or components of such a program, which will be further developed in Phase II of the Project.
6. To develop sequential curriculum guidelines consisting of behavioral objectives and suggested activities which were written using the format suggested in **Teachers' Handbook for Implementation of the State Curriculum for Educable Mentally Retarded.**

Phase I succeeded in training the intern physical education teachers involved, as evidenced by the fact that all were licensed by the Wisconsin Department of Public Instruction and all took positions in the Fall of 1970 as physical education teachers working with the mentally retarded.

A publication was made available from the Wisconsin Department of Public Instruction. This publication included a summary of the Phase I Project, identification of aspects or components of a physical education program, behavioral objectives for these components and curricular patterns for programming.

Phase II of the Title VI-B project consisted of a year-long comprehensive program of physical education and recreation for the transitional and educable mentally retarded students of the Riverview School during the 1970-71 school year. Curricular patterns, program content, behavioral objectives and activities, as suggested by Phase I of the Project, were expanded and implemented in the Riverview School program. An entire school-year's program of physical education and recreation for the mentally retarded pupils of the Riverview School was developed and conducted.

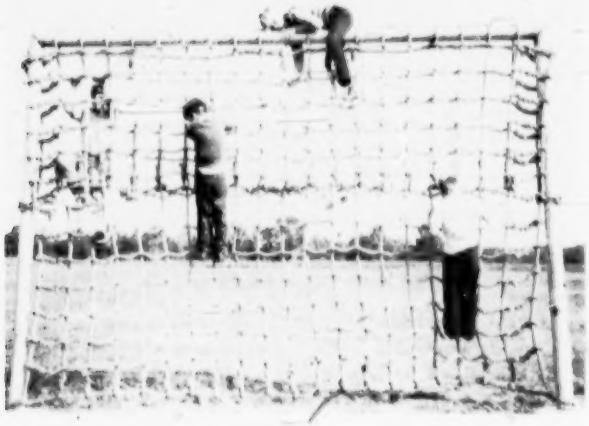
Phase II of the Project had as one of its goals the identification of successful physical education activities which would meet the needs of the retarded and relate to the behavioral objectives set forth in Phase I. This was accomplished at the transitional levels and at the three educable mentally retarded levels, namely primary, intermediate and junior high.

Evaluation and measurement of pupil progress in the development of physical fitness were accomplished through the administration of the **Special Fitness Test,** developed and published by the American Association for Health, Physical Education and Recreation. Fundamental movement patterns and skills were assessed through the medium of video taping. Tests of basic motor skills were used occasionally in order to evaluate their inclusion in the evaluative process. Skills and movement patterns essential to participation in the various seasonal sports and recreational activities were evaluated through teacher-prepared skill tests and **AAHPER Sports Skills Tests.**

Since the Wisconsin State Department of Public Instruction's **EMR Curriculum — A Persisting Life Needs Approach** does not contain a comprehensive section on physical education and recreation activities, Phase II developed such units on some of the successful activities conducted during the year-long project. Examples of these may be found later in this publication.

Phase II of the Title VI-B Project produced a library of video tape recordings which were of value to the physical education staff at the Riverview School. After editing, it is expected that these tapes will be made available to interested physical educators, special educators and other professional personnel who are currently or who will be working with the mentally retarded in the area of physical education and recreation.

Following completion of Phase II, it was intended that the Riverview School would disseminate pertinent information to interested individuals, groups and agencies. The preparation of this publication fulfills this last expectation.



Part I

The Mentally Retarded Child and Physical Education

Part I sets the atmosphere for the entire publication. The discussion of "Physical Education" includes its philosophy and purposes, characteristics of a sound program and recent trends. A definition of mental retardation and characteristics of the retarded child, both transitional and educable, are reviewed in "The Mentally Retarded Child." "Physical Education for the Mentally Retarded" relates the first two parts with this project. The Title VI-B project on physical education and recreation for the mentally retarded school population in Manitowoc, Wisconsin, is examined in "Physical Education at Riverview School." Program planning considerations, characteristics and implications for the Riverview School program and teaching suggestions are also explored. "Tests and Measurements" concludes this section.

Physical Education

Physical education is that phase of the total educative process which contributes to the total fitness, growth, development and skill acquisition of the child, primarily through movement-oriented experiences. Physical education, then, is education of, by and through human movement. As an integral part of education, it has the same general goal: the optimum development of each individual so that he may lead an enriched and abundant life.

Philosophy

Physical education is both a **means** and an **end.** As a **means** it provides a medium for optimum growth and development of the child. Through directed, purposeful and exploratory activity, centered around the total body, the child has an opportunity to learn more about himself and his environment. He is able to explore his environment by reacting to and through his senses, by moving about and by manipulating objects. The child has the opportunity to acquire maximum motor development and control; positive body-image and self-concept; communicative skills; creativity and the ability to solve movement problems. He has the opportunity to practice and improve skills which are essential to the learning process.

Physical education is an **end** in itself because physical fitness and the acquisition of desirable movement skills are needed for full living. With the inevitable shortening of the work week, more adults than ever before will have extra leisure time. Physical education in the school setting can provide the necessary guidance and appropriate skills for using these leisure hours wisely and constructively.

Purposes of Physical Education

A list of the major purposes of a program of physical education includes the development of the following:

1. Basic muscular strengths and the coordinations essential to fundamental movement skills.
2. Correct postural habits and the ability to relax.
3. Mastery of physical skills with the capacity for sustained effort through exercise of large muscles and vigorous play.
4. Body poise and creativity in motion through enjoyable rhythmic activities.
5. Sufficient skill in motor activities to allow for pleasure and satisfaction in participation.
6. The individual's interest in maintaining his own optimum physical, mental, social and emotional well-being.
7. The individual's desire to appreciate and master worthwhile recreational skills.
8. Social integration of each individual within the group through activities which provide social group interaction.
9. Emotional stability through frequent and vigorous participation in activities which provide the opportunity for experiencing success and satisfaction.
10. Desirable social attitudes inherent in group interaction, such as leadership and followership; subordination of the individual for the welfare of the group; generosity to opponents; tolerance toward peers of different races, creeds or physical abilities.
11. A sense of individual and group responsibility for civic behavior on the playground, in the school and in the community.
12. Courage, initiative, alertness, self-control and cooperation in group games and individual games.
13. Attitudes and habits which reflect a knowledge of safe and healthful behavior.

Characteristics of a Sound Physical Education Program

A program of physical education and recreation which has the following characteristics may be considered sound.

1. Development of not only the muscles and organs, but the **total** child, physically, mentally, emotionally and socially.
2. Coordination with the school health program to ensure development of the optimum health of each child.
3. Provision of friendly and sociable contacts of playdays, intramural leagues and recreational meets or contests, as well as appropriate competitive challenges.
4. Development of the skills and knowledges necessary if the child is to safely cope with the

physical hazards which he may encounter in his environment.
5. Correlation with the school and community recreation programs.
6. Provisions for healthful social growth through coeducational activities.

Recent Trends in Physical Education

Traditionally, physical education programs were largely based upon a sports-oriented curriculum. Too often the elementary and junior high programs were more or less a "varsity-sport factory", with the most capable or athletic students receiving most of the benefit. Students were required to engage in seasonal competitive sports or in group activities designed to develop total organic fitness. Sports skills were developed in logical sequencial order — from basic motor skills through lead-up activities to the finished athlete, capable of competing at a high-skill level. Those students who found difficulty with even the basic rudimentary motor skills were forgotten or lost along the way. They were considered clumsy, awkward and uncoordinated — someone who hindered the progress of the rest of the class. Little thought was given as to why they were deficient in skills and abilities.

Only in recent years have physical educators heeded the criticisms and questions asked about the direction and purposes of such programs. Researchers have found that underlying the development of fundamental motor skills and abilities are many factors which determine the progress of the individual in acquiring these skills. Among them are motivation, readiness to learn and sensory- and perceptual-motor difficulties. Increasing evidence points to the fact that perceptual-motor competency is closely associated with academic learning, particularly reading readiness and achievement. It is thought that perceptual-motor training aids in the development of reading skills, as well as in developing basic motor skills. Other terms appearing on the physical education scene have included motor patterning, movement exploration, motor education, as well as the previously mentioned sensory- and perceptual-motor training. These appear to prove that the curricular content of physical education programs is changing, particularly at the elementary school level.

The formulation of the various theories, laws, and principles of perceptual-motor development was initially intended for use with normal children who were experiencing difficulties in reading and other academic skills or in certain movement-oriented activities. Most theorists support their claims by the fact that early motor development in children follows an orderly sequence of events. Difficulties in basic motor skills can be traced back to a missed step in the progression which ultimately affects academic skill development and achievement, the goal of perceptual-motor training programs.

Neurological Organization Theory

Doman-Delacato and others base their system of training on the theory of neurological organization. They are concerned primarily with children who are or who have been diagnosed as brain-damaged. Their theory is based upon the assumption that every individual passes through a definite sequence of steps during sensory-motor-cognitive development. Should any of these steps be omitted, the neurological organization of that individual may be faulty and the individual may exhibit certain difficulties in mobility, vision, audition and communicative skills. Treatment involves a series of replicated motor patterns designed to reproduce the normal activity of undeveloped or damaged part of the brain.

Proponents of the neurological organization theory have frequently reported large, dramatic gains in the cognitive or intellectual functioning of individuals who have undergone the program of patterned activity. Frequent and just criticisms have been made of these studies, mainly on their failure to apply even the simplest elements of experimental and/or statistical design. Clear-cut proof of the benefits of planned programs of "neurological organization" upon cognitive or intellectual development in the individual has yet to be established.

Perceptual-Motor Theory

The work of Dr. Newell Kephart has greatly influenced the direction of perceptual-motor training programs in the nation's schools. Kephart bases his approach to training upon his "Perceptual-Motor Theory." His program is similar to that of the "neurological organization" theorists in that he stresses the importance of motor experiences in the total education of the child. It differs since he does not advocate the imposition of patterns on the central nervous system through structured movements. Kephart regards the cause of learning problems as a breakdown in stimulus-response, causing incomplete correction of perceptual errors. His training program frequently takes the child back to basic motor patterns, recapitulating the patterns upon which behavior is built.

Dr. Bryant Cratty's approach is very similar to Kepharts'. Cratty believes that movement is the fundamental dimension of all human behavior. Movement enables man to explore and survive in his environment. The basic difference of Cratty's philosophy from Kepharts' is that Cratty believes movement is a **means** to learning. Specific perceptual-motor tasks are used to enhance the learning process.

Dr. Ray Barsch evolved twelve dimensions which might serve as areas of developmental concern in building a curriculum: (1) muscular strength; (2) dynamic balance; (3) body awareness; (4) spatial

awareness; (5) tactual dynamics; (6) kinesthesia; (7) auditory dynamics; (8) visual dynamics; (9) bilaterality; (10) rhythmics; (11) flexibility; and (12) motor planning. Barsch named his theory "movigenic curriculum." His premise held that a movement-oriented efficiency supplement to a regular curriculum has promise in making a significant contribution to the optimal achievement of children with learning disorders. It is not known if Barsch's "movigenic curriculum" has ever been implemented into a special education curriculum for the retarded. Readers are encouraged to obtain a copy of Barsch's publication and view his film for possible implementation in their programs. To obtain a copy of **Movigenic Curriculum,** Bulletin No. 25, contact the State Department of Public Instruction, Division for Handicapped Children's Services, 126 Langdon Street, Madison, Wisconsin. His 45 minute film "The Movigenic Curriculum" which depicts the classroom activities involved under Barsch's twelve dimensions is available from the Bureau of Audio-Visual Instruction, The University of Wisconsin, 1312 West Johnson Street, Madison, Wisconsin.

Another perceptual-motor training program which has been widely adopted is the **Frostig Visual-Perceptual Training Program** developed by Marianne Frostig. She assumes that reading ability depends upon visual-perceptual skills. The **Frostig Developmental List of Visual Perception** is used to identify the child with visual-perceptual difficulties. Frostig's test has five areas designed to account for specific problems common to children with reading disabilities. The areas are: (1) visual-motor coordination; (2) position in space; (3) spatial relationships; (4) perceptual consistency; and (5) figure-ground perception. Work sheets are used with the identified child in order to improve difficulties exhibited in any or all of the five abilities. The physical educator may be able to work hand-in-hand with the classroom teacher in developing the visual-motor area, using the Frostig materials.

Special Physical Education

In May of 1965, the Project on Recreation and Fitness for the Retarded, a division of the American Association for Health, Physical Education and Recreation was formed. Its main goal was to aid in developing comprehensive programs of physical education and recreation for the mentally retarded of our nation. Through financial assistance from the Joseph P. Kennedy, Jr. Foundation, matching-funds grants were made available for the establishment of pilot programs across the nation. The State of Wisconsin was especially fortunate in that two Wisconsin schools were recipients of the grants — St. Coletta School, Jefferson, and the Walworth County Special School, Elkhorn.

Dr. Julian Stein headed the Project on Recreation and Fitness for the Retarded from its inception. Dr. Stein has since become Consultant, Program for the Handicapped, which now includes the Project and others similar to it, for all handicaps.

Dr. Stein is well aware of the works of the aforementioned theorists. He feels, as do the writers of this publication, that all the theories presented may have some merit in planning a program of physical education and recreation for the retarded. It is up to the individual special educator or physical educator to critically examine and evaluate the works presented. He must decide whether or not any of the programs warrant inclusion in his own particular program.

Dr. Stein believes in the eclectic approach — study the literature and available programs and take from each that component or components which may prove useful in one's own program. Stein believes that physical education for the mentally retarded does not require drastically different content than the regular physical education program for the non-retarded. The real difference is in the teacher's consideration of the special needs of the retarded child and techniques to meet these special needs, abilities and interests of the individual so that each can reach his maximum level of independence.

The Mentally Retarded Child

Children vary tremendously in the degree of intellectual capacity with which they function, ranging from extremely inferior to extremely superior levels. Although there have always been children with limited intellectual capacity, only in recent years has a more adequate recognition of the nature of their specific characteristics and problems been developed.

There appears to be a lack of uniformity in the use of terms or "labels" to describe those individuals

who exhibit retarded mental development, which has led to considerable confusion among the professional disciplines which are concerned with the problem (medical, psychological, educational, social and legal).

Definition of Mental Retardation

The American Association on Mental Deficiency describes mental retardation as: "subaverage general intellectual functioning, which originates during the developmental period and is associated with impairment in adaptive behavior." In less technical terms, the mentally retarded child is one who from childhood experiences unusual difficulty in learning and is relatively ineffective in the application of what he has learned to the problems of everyday living. He requires special training and guidance to make the most of his capabilities, whatever they may be.

Over the years, many "labels" have been applied to the child who exhibits limited intellectual capacity. Today, the degree of retardation, as measured by individual intelligence tests, is used to designate the degree to which retarded individuals differ from "normals" and from other retardates.

Trainable or Transitional Mentally Retarded

These children can acquire basic skills of self-care, social adjustment to the home and neighborhood, oral communication and a degree of economic usefulness in a sheltered workshop situation. The State of Wisconsin categorizes these children for educational purposes as being in the intelligence quotient or I.Q. range from 35 to 50. The term 'Trainable' has recently evolved into the term 'Transitional' which will be used in all further discussions of children in this I.Q. range.

Of the children in the Transitional level, perhaps one-third to one-half are estimated to exhibit Down's Syndrome of Mongolism. These children experience the most severe movement problems, which appear to be relatively unaffected with maturity. The remaining children in the Transitional category have many of the same difficulties as the Mongoloid, but to a lesser degree. Observable decreases in ability with increasing age may indicate that motivation (or the lack of it) is an important modifier of performance in late childhood or early adolescence.

Educable Mentally Retarded

The educable child will usually have the capacity to acquire academic skills of the fourth to sixth grade level, pre-vocational skills, a moderate degree of social adjustment and a satisfactory ability for self-support. Educable mentally retarded children fall within the 50 to 80 I.Q. range, as established by the State of Wisconsin. Educable mentally retarded children can be educated sufficiently for re-entry into the mainstream of society. Most are able to take their place in the world of work after completing an educational program in the school setting.

Characteristics of the Mentally Retarded

In planning any type of educational program for the mentally retarded, whether transitional or educable, the educator must know some of the characteristic peculiar to retarded children. With this knowledge of the children for whom the program is being planned, he will be better able to plan a program designed to cope with their limitations and needs.

Although the oft-used cliche "the retarded child is more **like** than **unlike** his non-retarded peers" is true in certain respects, he does exhibit some characteristics which are not typical of the majority of the "normal" population. For the purposes of the Title VI-B Project at Manitowoc, only those characteristics which have implications in planning a comprehensive program of physical education and recreation will be discussed below. This list is not intended to be all-inclusive. Not all retarded children will exhibit these characteristics, and those who do, will possess them in varying degrees.

Many retarded children exhibit signs of below-average motor coordination in both gross and fine motor activities. This may be the result of strength and flexibility deficiencies, coupled with a poor body-image or self-concept.

The performance of retarded children tends to lag two to four years behind that of his normal peers. This may not be entirely due to lack of motor ability. Often, a complex motor skill involves an associated intellectual action which may limit the motor performance of the mentally retarded child.

Research by various investigators has shown that retarded children score well below the national age norms of normal children on tests of physical fitness. This "physical retardation" may not be directly caused by the accompanying mental retardation. Too often, it is the result of isolation from peers in group play situations during early childhood or from the exclusion of the retarded child from a sound program of physical education and recreation during his school years. Other factors which may be responsible for the retarded child's physical short-comings include complexity of games, over-protection by parents, a lack of confidence in exploring unfamiliar activities, a lack of skill and perceptual-motor difficulties.

Physical Education for the Mentally Retarded

Most children exhibit the need for play during their developmental years. As they play, they not only experience fun and satisfaction, but usually develop physically, mentally and socially. Mentally retarded children, especially, need play if they are to develop those skills, knowledges and attitudes necessary to make them a worthy member of their society. However, retarded children often do not play spontaneously. They must be taught to play. Far too many retarded boys and girls have this avenue of happiness and success closed to them, because they have been excluded from the play experiences which so many non-retarded children have open to them.

Retarded children **can** grow and learn through play in every area of development, just as normal children do. Perhaps the only difference is in the levels of achievement. They may be handicapped by poor physical coordination, poor communicative ability and perceptual-motor difficulties in addition to, or as part of, mental retardation. These factors may make it necessary to teach the retarded child in a slightly different way from teaching normal children.

The Title VI-B Project on physical education and recreation for the mentally retarded, conducted at the Riverview School in Manitowoc, Wisconsin during the 1970-71 school year was concerned with the development of a comprehensive program of physical education and recreation, especially designed to meet the needs of its mentally retarded school population. It was not designed to be "an old book with a new cover." Certainly the goals and program content paralleled those of programs for the non-retarded. The premise was that the Riverview program would differ in its emphasis on certain portions of the total physical education and recreation program, and in its teaching techniques and approaches.

Physical Education at Riverview School

Riverview School is a day campus facility serving the mentally handicapped school population from the Manitowoc, Mishicot, Reedsville, Two Rivers and Valders School Districts in Manitowoc County. The school was occupied by children for the first time in September, 1970 and offers a gymnasium, therapeutic pool and multi-purpose room as indoor teaching stations for physical education and recreation activities. The school is constructed on a sixteen acre site which provides ample area for outdoor physical education and recreation activities.

The school population is comprised of transitional (trainable) mentally handicapped youngsters from ages five through twenty and educable mentally handicapped children from ages five through junior high level. The educable youngsters then enter secondary special education programs in their respective high school.

A major aim of the physical education program at Riverview School is to provide a directed program in which every youngster will develop skills and fitness commensurate with each individual's ability. Activities will be designed to provide maximum opportunity for the youngster to develop desirable self concept, social, emotional and leisure time skills. The ultimate objective of this program is that the retardate will become an economically and socially productive member of his community.

Another major aim of the physical education program is to prepare those educable, mentally handicapped youngsters, who will eventually transfer to a regular school program or a secondary special education program for the requirements in physical education and recreation which is designed for the normal school population. Educable youngsters will participate in intramural sports at Riverview School and shall participate in interscholastic athletics in their regular school programs if they possess the necessary skills to compete at this level.

Another major aim is to provide opportunities for the youngsters at Riverview School to develop the necessary skills, social and physical, to participate in activities which are commonly carried out in their home neighborhoods. These youngsters must be encouraged to maintain their peer relationship in their local communities and physical education and recreation can definitely promote this social interaction and acceptance.

Considerations in Program Planning

Physical characteristics of the mentally retarded have been discussed previously. In planning a truly comprehensive program of physical education and recreation for the mentally retarded, developmental characteristics of these children at the various levels must be taken into consideration. The reader will note that the following charts present the characteristics with accompanying implications for physical education programs.

Transitional mentally retarded refer to those students in the Riverview School who are in the 35 to 50 I.Q. range. Although the school has divided its transitional population into four levels according to chronological age — primary, age 5-8; intermediate, age 9-12; junior high, age 13-15; and secondary, age 16-20 — the chart lists characteristics which are prevalent in transitional students of all age levels.

The educable mentally retarded at Riverview School, who fall within the 50 to 80 I.Q. range, have been categorized into three levels by chronological age — primary, age 5-10; intermediate, age 11-13; and junior high, age 14-16. Separate charts will be found for each age level of educable students.

TRANSITIONAL (TMR)

Characteristics	Implications for Physical Education
Lack communicative ability.	Teach an understanding of simple commands, such as go, stop, line up, etc.
Show little interest in play.	Must be taught how to play. Motivation important.
Self-help or self-care skills poor.	Teach personal hygiene, dressing, shoe tying, etc.
Physical fitness very poor, tire easily.	Stress building of strength, power, agility, flexibility. Daily program of physical activity with frequent rest intervals.
Little sex differences in interest.	Identical activities for boys and girls.
Basic motor skills lacking.	Stress building of basic fundamental skills.
Attention span short, especially younger TMR.	Minimal directions, frequent change in activities, games of low organization.
Seek physical affection.	Show praise, encouragement through physical means, such as pat on the back, hand shake, head rub. etc.
Self-centered.	Improve social interaction through small group play.
Lack social graces and courtesies.	Teach basic social graces, waiting for turns, respect for others.
Cannot think abstractly.	Learn through imitation, concrete examples.
Not curious about what the body can do (self-Image).	Movement exploration of the world about, self-testing activities.
Not naturally rhythmical.	Simple imitative rhythms, singing games.
Perceptual-motor difficulties.	Basic perceptual motor activities.
Mental ability severely limited.	Stay with activities for longer periods of time before changing. They do not mind repetition.

PRIMARY

Characteristics	Implications for Physical Education
Still active, attention span longer, showing interest in group play.	Daily large muscle activity program, group play, introduction of team-play concept through relays, competition not stressed but present to a degree.
Likes physical contact.	Dodgeball-type games, rough-and-tumble games of low-organization.
Enjoys rhythms, especially girls.	Creative rhythms, singing games, very simple folk dances.
Developing more skills and interest in skills.	Basic movement activities, introduce organized practice of skills.
Eye-hand coordination improving.	Continued manipulation of objects. Greater emphasis on fine-motor activities.
Perceptual-motor difficulties less evident.	Continued perceptual-motor work — right, left, unilateral, bilateral and cross-lateral movements.
Becoming more interested in sports.	Introduce basic sports skills and simple lead-up activities.
Self-image improving.	More challenge need through self-testing activities.
Seek recognition.	Provide opportunities to achieve success and activities which require **some** responsibility and self-direction.
Retention of teachings longer.	Less repetition required.
Reaction time improving.	Activities which promote quick reactions.

INTERMEDIATE

Characteristics	Implications for Physical Education
Steady growth — girls more rapidly than boys. Boys more interested in game skills. Tire easily.	Continued daily vigorous activities with fewer rest periods. Separate sexes for most activities. Stress **correct** movement fundamentals and posture.
Personal hygiene important.	Showers following physical activity. Considerations must be made for girls reaching puberty.
Competitive spirit shown.	Need competition through individual, dual and team sports as well as combatives.
Sports interest.	Teach seasonal sports with emphasis on lead-up games and variety.
Little interest in opposite sex. May develop antagonism.	Some coeducation activities, social customs and courtesies through folk and simple square dances.
More responsible.	Establish rules and regulations. Allow for more self-direction and self-governing of games.
Desire to succeed.	Stress physical fitness as being essential. Set easily attained goals. Avoid frustration through failure.
Posture problems may appear.	Stress good posture. Special posture instruction may be necessary.
Rapid, uneven growth with coordination being affected.	Allow for individual differences in coordination.
Girls develop different interests than boys.	Stress poise, grace, in movement for girls. Boys need rough games requiring bodily contact, strength.

JUNIOR HIGH

Characteristics	Implications for Physical Education
More active, endurance level increased.	Daily periods of vigorous activities of longer duration with periods of less vigorous activities interspersed.
Sex differences more pronounced. Antagonism toward opposite sex more apparent.	Segregated activities for boys and girls and activities which meet special interests of boys and girls together. Opportunities to learn respect for others.
Individual differences more apparent .	Physical activities suitable for each boy and girl and opportunities for each to participate with others of comparable ability.
Desire to develop new and more complex skills.	Opportunity for analysis of present level of skill and direction in improving that level.
Leadership and followership.	Opportunities to lead or have greater responsibility, to follow by being a member of a "team".
May exhibit inappropriate means of expressing emotions.	Stress sportsmanship, winning and losing.
Democratic practices.	Allow pupils to express opinions, participate in rule and regulation planning, elect captains, etc.
May be moody, lazy, uncooperative, rebellious, boisterous, overly-aggressive.	Teacher should be warm, show affection and have a sense of humor, giving frequent assurance, encouragement and praise for accomplishments.
Need to think critical, develop self-image, and problem-solve.	Allow evaluation of one's skills, level of accomplishment, self-appraisal.

Teaching Suggestions with the Retarded

Experience in teaching the mentally retarded in the area of physical education and recreation will reveal certain unique techniques, methods or approaches which work better than others. The following teaching suggestions have been "lifted" from the literature or are the result of teaching experience with the retarded, and are slanted toward the teaching of physical education and recreation activities.

1. Progress slowly, offering familiar skills and activities first. Repetition is often necessary for reinforcement of learning.
2. New activities and skills should be introduced early in the class period while the youngsters are still fresh.
3. Directions must be clear and concise, with demonstrations given by the teacher or capable student when necessary.
4. Keep each child active. Avoid elimination-type games of low-organization. Provide each child with an object or implement when teaching manipulative skills. Avoid waiting in line.
5. Set easily attainable goals with the idea of success and not failure in mind. Frequent praise and assurance should be given.
6. Allow for some choice of activities and release of creativity. Class should be structured, yet have flexibility and freedom.
7. When determining an approach to use or an activity to include, consider chronological age as well as mental age to avoid insulting students with "baby" games or activities.
8. Keep **fun** in fundamentals. Rote drill need not be used if suitable enjoyable drills or relays will accomplish the same end.
9. Retarded children, especially the transitional students, are great imitators. Teach through indirection as well as direction.
10. To ensure teams of comparable ability in team activities, avoid choosing of sides by students. The teacher is often the best judge of skills and abilities of his students.
11. Do not use "imaginary markings or boundaries." It takes only a few moments to make a court or play area. Have all necessary equipment or apparatus on hand at the start of an activity.
12. If at all possible, avoid the use of a whistle. With orientation, students will respond just as readily to a hand clap or raising of the arm.
13. Work on one aspect of a skill or activity at a time. By concentrating on only one task, the retardate can focus all of his attention on performing that task and is less likely to become confused and fail.

14. Encourage controlled verbalization of the children while performing movement-oriented activities.
15. Conclude a physical education period with a "fun" activity. Often a simple tag game or running game will enable the children to leave the class with "a good taste in their month", anxious to return the following day.

Tests and Measurements

Evaluation is a constant procedure of determining where an individual is in relation to established values or goals, and the use of this information in re-directing efforts to attain the values and goals.

Instruments of evaluation cover a broad spectrum — from simple performance achievement tests to written objective tests. They include motor performance tests, perceptual-motor surveys, tests of physical fitness, sports skills tests, rating scales, performance charts, anecdotal records, check lists and social inventories, to name a few.

USES Results or findings from the various tests and evaluative devices can be used by the physical educator to classify students homogeneously; to determine the individual student's status in regard to fitness, skill proficiency and social competencies; to measure progress or retrogression; and to provide an objective means of marking or grading, if required by the school.

Evaluating Tests

Before a test can be considered for inclusion in a program, the teacher must examine it to determine if it has been constructed scientifically and if it does an accurate job of measuring what it is designed to measure. The criteria used to evaluate a test include:

1. **RELIABILITY** This refers to the consistency of test results for any given test. For example, if a test were administered by a teacher to a group of students on two separate days, would the test results be similar on the second day to those obtained on the first day? (same teacher; same group)
2. **OBJECTIVITY** Identical in meaning to reliability, except that a different instructor administers the test on the second day. Will the two test administrators agree when using the same test on the same group?
3. **VALIDITY** Does the test really measure what it purports to measure? Are the individuals who score highest on the test really the best performers?
4. **NORMS** These are standards to which an obtained score may be compared. The physical educator who teaches the retarded must know if the norms for a given test are designed for "normals" or the mentally retarded.

5. **ADMINISTRATIVE EASE** To be feasible for inclusion in the program, a test must be economical in terms of cost and time required for its administration.

Testing at Riverview School

Riverview School used the **AAHPER Special Fitness Test** to measure the physical fitness of its transitional and educable students during the 1970-1971 school year. The seven-item test was administered to the students in the fall of 1970 and again in the spring of 1971. Significance of gains has not been statistically analyzed, but an observable increase in the percentile score for most students on the test were noted.

Certain problems or difficulties arose in administering the Special Fitness Test. For example, on test items requiring the counting of repetitions or the measurement of distances thrown or jumped, the instructor usually had to personally do this. Timing of various items on the test had to be done by the instructor. Transitional students, especially had difficulty with the 300-yard run — where to run, how far and why.

Sports skills attainment was measured at Riverview School through teacher-made tests and selected tests from the **AAHPER Sports Skills Test Series.**

Some time was devoted to the testing of perceptual-motor competencies, making use of Cratty's and Kephart's check list of perceptual-motor behaviors.

In summary, the physical educator working with transitional and educable mentally retarded children must carefully examine and evaluate the inclusion

of the various instruments of evaluation and measurement in his program, keeping in mind some of the considerations mentioned above. Tests and measurements may be applied to the program of physical education and recreation for the mentally retarded by:

1. Determining which youngsters are below average in terms of test findings.
2. Diagnosing deviations from normal.
3. Constructing a program based on the child's needs.
4. Retesting to determine if improvement has taken place.

Testing and Measuring Individual Progress

There are many evaluation scales and test instruments which may be used to assess the psychomotor function and physical fitness of the mentally retarded. Phase I of the project used the Special Fitness Test as developed by the American Association for Health, Physical Education and Recreation. The following list is not all-inclusive but merely a representation of some selected approaches used in evaluating these important aspects of function among educable, trainable, severely, and profoundly retarded.

TESTS OF PSYCHOMOTOR FUNCTION

Basic Motor Test. (Donald A. Hilsendager, Dept. of Physical Education, Temple University, Philadelphia, Pa. 19122). This test consists of qualitative (i.e., pass-fail) and quantitative (i.e., measured) test items. Qualitative measures are concerned with fundamental motor skills; quantitative items measure more specific motor skills. Direct all requests for further information and permission to use the test to Dr. Hilsendager.

Exercises for the Mentally Retarded: How to Develop Physical Functions in the Growing Child (Evelyn Loewendal, A. C. Croft, Inc., Swarthmore, Pa. 19081). This publication suggests basic principles for interpreting levels of physical growth and motor development in mentally retarded children. Some appropriate exercises and physical activities are described for five different developmental levels, with a built-in evaluative instrument and a program guide for pertinent activities.

Mobility Testing of Neurological Organization (Ernest P. Davis, Crowley Special School, 82 East Delos St., St. Paul, Minn., 55107). Included are measures of fundamental movements, perceptual-motor relationships, basic motor skills, and specific motor skills. Attention is given to social, emotional, and intellectual development, and the interaction of each with the specific motor traits. Some of these approaches are included in **The Ernie Davis Lesson Plans Book** (St. Paul, Minn.: H. M. Smyth Co., Inc., 1965).

Motor Perceptual Survey (Matthew E. Sullivan, Physical Education Consultant, Special School District of St. Louis County, 9820 Manchester Rd., Rock Hill, Mo. 63119). Test items are classified under general headings of balance, self-awareness, spatial orientation, and related areas. Survey can be administered as part of class routine.

Movement Pattern Checklists (Barbara B. Godfrey and Margaret M. Thompson, University of Missouri, Columbia, Mo. 65201). These checklists evaluate the major basic human movement functions and are intended to give a status assessment of patterns fundamental to human performance which form the foundation for human movement. These checklists are suitable for use by either trained or untrained personnel.

Oseretsky Tests of Motor Proficiency (Educational Test Bureau, Educational Publishers, Inc., Minneapolis, Minn.). A maturation scale of motor proficiency resembling the Binet Intelligence Scale in construction. Several revisions have been made by American investigators. The test must be administered individually and requires at least 45 minutes per person.

The Perceptual-Motor Attributes of Mentally Retarded Children and Youth (Bryant J. Cratty, Dept. of Physical Education, University of California at Los Angeles, Los Angeles, Calif. 90024). Report of a study sponsored by the Mental Retardation Services Board of Los Angeles County. Test items are listed for two levels in each of six categories (body perception, gross agility, balance, locomotor agility, throwing and tracking). Suitable for use with educables, trainables, educationally handicapped and Mongoloids.

A Program of Developmental Motor Activities for Retarded Children (Louis Bowers, Dept. of Physical Education, University of South Florida, Tampa 33620). This program contains measures of neuro-

logical fitness and a developmental program involving movement exploration, balance, trampoline, and perceptual activities.

The Purdue Perceptual-Motor Survey (Eugene G. Roach and Newell C. Kephart, Charles E. Merrill Books, Inc., Columbus, Ohio, 1966). Book contains procedures for administering and scoring the survey, which includes a variety of perceptual-motor test items.

TESTS OF PHYSICAL FITNESS

Kraus-Weber Test of Minimum Muscular Fitness (Hans Kraus and Ruth Hirschland, "Minimum Muscular Fitness Test in School Children," **Research Quarterly** 25: 178-188, May 1965). Tests of minimum muscular fitness which determine whether an individual has strength and flexibility in parts of the body upon which demands are made in normal daily living. Items include measures of strength of abdominal and psoas muscles, upper and lower back muscles, and flexibility of back and hamstring muscles.

Physical Fitness for the Mentally Retarded (Frank J. Hayden, distributed by Information Center-Recreation Center for the Handicapped, c/o Little Grassy Facilities, Southern Illinois University, Carbondale 62901). Battery of eight test items which assess levels of muscular and organic fitness. Age norms (8-17 years of age) according to sex for each item of the battery are included for the trainable retarded.

Physical Fitness Test Battery for Mentally Retarded (Hollis Fait, School of Physical Education, University of Connecticut, Storrs, Conn. 06268). Battery of six items considered appropriate for both trainable and educable mentally retarded youngsters.

Special Fitness Test (American Association for Health, Physical Education and Recreation, 1201 Sixteenth St., N.W., Washington, D.C. 20036). An adaptation of the original Youth Fitness Test in which three of the seven test items have been modified and standards have been determined from norms based on a large national sample of educable mentally retarded children.

DEVELOPMENTAL PROFILES

Denver Developmental Screening Test (University of Colorado Medical Center, Denver, Colorado 80220). Test devised and standardized to provide a simple, clinically useful tool to assist in the early detection of children with serious developmental delays.

T.M.R. Performance Profile (Reporting Service for Exceptional Children, 563 Westview Ave., Ridgefield, New Jersey 07657). Evaluation scale, based on teacher observation, presents graphically the current status of an individual child, helps the teacher evaluate more really existing needs, plan for individual growth and record change and development. Various indexes make it possible to evaluate one major area against another and to assess progress in the various areas from year to year. They also publish an **E.M.R. Performance Profile.**

A Special Diagnostic Battery of Recreative Functioning for the Trainable Mentally Retarded (developed by Jean Mundy, Dept. of Recreation, Florida State University, Tallahassee 32306) Instrument measures skills, abilities, and competencies needed by an individual if he is to participate in different recreational activities with success.[1]

Nelson Reaction Timer

Nelson's Reaction Timer is an instrument designed to test reaction time, speed of movement and response accuracy. Copyrighted in 1965, the Nelson Reaction Timer resembles a yardstick. Utilizing the Law of Gravity, the stick is calibrated in minute distance units, representing the fall of the stick in thousandths of a second.

The subject is seated at a table with his dominant arm and hand resting on the table. The examiner holds the stick vertically aloft with its lower end between, but not touching the subject's thumb and forefinger. The subject intensely studies the stick and when it is released by the examiner, he grasps the falling stick. Noting the reaction time from the stick's marking, the examiner repeats the procedure for a total of twenty trials, recording the results of each individual trial. The five slowest and the five fastest of the trials are discarded; then the middle ten trials are averaged. This average is considered the subject's score for the test.

In the opinion of these writers, the Nelson Reaction Timer lacks administrative ease, a most important factor in considering any evaluative device. The fact that the subject must be isolated from the group and the procedure of dropping the stick twenty times, recording each trial, raises the question of whether or not the physical educator has the time for its use. Perhaps, through the use of teacher aides or volunteer help, the Nelson Reaction Timer may have merit. We are not questioning the validity of this device, only its ease of administration.

Readers who may be interested in obtaining the Nelson Reaction Timer are encouraged to do so and to use it in their own situation, before accepting our opinion. Contact: Fred Nelson Creations, Inc., P.O. Box 51987, O.C.S., Lafayette, Louisiana 70505.

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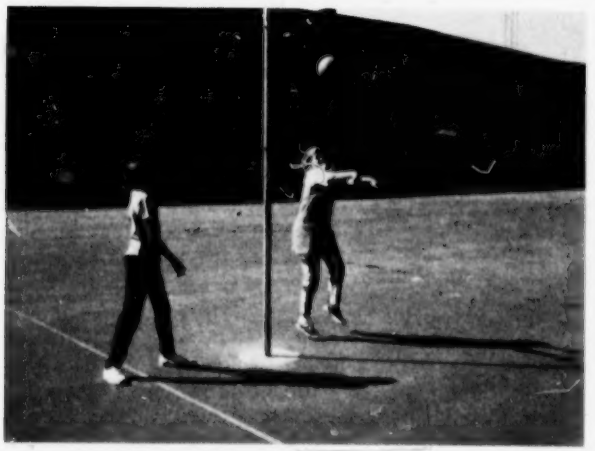
[1]This material was selected from the book, **A Guide for Programs in Recreation and Physical Education for the Mentally Retarded,** which is available from the American Association for Health, Physical Education and Recreation, 1201 Sixteenth St., N.W., Washington, D.C. 20036.



Part II

Development Patterns and Skills

Participation in the various activities found in a comprehensive program of physical education and recreation for the mentally retarded require the acquisition of certain fundamental patterns or skills. Part II discusses these patterns or skills, presenting a brief narrative, a behavioral objective, common deviations to watch for, and suggested developmental activities for use in developing the stated pattern or skill, at each level. It is expected that with the acquisition or mastery of the skills presented, the mentally retarded child will be capable of participation in the various games, activities and sports found in Part III.

Program Considerations

When organizing and implementing a program of physical education and recreation, certain factors or considerations must be taken into account by the instructor. Since Part II of this publication deals with skills or patterns to be taught, it seems appropriate that the discussion following relate such considerations as health and safety, perceptual-motor competencies and physical fitness, which all, in one way or another, have an effect on how well the mentally retarded child will learn the skills and patterns presented. The teaching of health and safety, perceptual-motor competencies and the development of physical fitness have not been taught as units in the Riverview School physical education program. Instructors have been cognizant of their importance and have taught or developed them as an integral part of other teachings.

Health and Safety

The physical education class or recreational activity period is perhaps one of the most effective methods of teaching health and safety to the retarded. Health and safety education cannot be a separate entity, divorced from the physical education and recreation activity period. The teaching of these concepts to the retarded can be accomplished through direct and/or indirect learning situations. In reality, the physical educator teaches health and safety concepts through daily movement-oriented activities where he stresses safe behavior and healthful self-care skills and attitudes. When introducing new activities or skills, he rarely fails to emphasis inherent dangers. Foot care, personal hygiene and safety can best be taught where they are most important — in physical education.

Although the Riverview School physical education program did not teach health and safety on a unit basis during its initial year of operation, 1970-71, there can be no doubt as to whether or not the retarded students received some type of instruction in these two important areas. The school nurse and the home economics teacher did present a brief unit to the older girls on personal hygiene and self-care, but the boys did not receive formal instruction. All students received some indirect learning of health and safety concepts, along with other learnings in the classrooms, gymnasium, swimming pool and on the playground.

Perceptual-Motor Competencies

Perceptual-motor competencies, per se, are not taught in the physical education class as an entity. They are inherent in many of the traditional activities found in a program of physical education and recreation, such as ball skill development, rope jumping, balance beam activities, manipulation of objects, apparatus activities, fundamental rhythmic activities and trampoline activities.

Theorists, such as Kephart, Cratty, Doman-Delacato and others appear to disagree on their terminology when discussing perceptual-motor competencies. Each has his own set of terms used to describe the factors to be developed. Generally, perceptual-motor theories represent the following factors:

1. **VISION** Visual-motor competencies usually include visual discrimination, figure-ground or tracking, depth perception and autokinetic movement (impression that stationary object is moving).
2. **AUDITION** Auditory-perception includes figure-ground, sound directionality, and rhythm perception.
3. **TACTILE** Touch sensors in the skin.
4. **BALANCE MECHANISMS** Inner ear which affect spatial orientation.
5. **PROPRIOCEPTION** Body-image and body-awareness.

This publication goes on record in stating that although perceptual-motor activities have become popular, they are not a "cure-all" nor should entire class periods be devoted to their development. The physical educator should read the research and decide for himself if perceptual-motor competencies warrant a separate emphasis in the physical education program. These competencies can be developed just as well through carefully selected "traditional" physical education and recreation activities.

Physical Fitness

Physical fitness is a third area which is developed through indirect methods. Certainly, physical fitness can be a determinent as to how well children will perform or learn the fundamental patterns and skills essential to participation in physical education activities. Physical fitness development was in vogue in the early 1960's. This trend completely changed many physical education programs to the point where physical fitness became an **end** in itself, rather than a **means.** Entire programs became fitness-oriented. The trend in physical education and recreation for the mentally retarded appears to be movement-oriented, that is, fundamental skills and patterns are taught, along with practical application of them to the activity program, with physical fitness receiving a lesser emphasis. Most programs make use of the Special Fitness Test, developed by the Project on Recreation and Fitness for the Retarded, a division of the American Association for Health, Physical Education and Recreation. This is a modification of the original Youth Fitness Test,

a seven item test of physical fitness originally designed for the non-retarded.

The test battery is given twice yearly, usually in the Fall and Spring. It has merit, in that weaknesses in specific components can be detected and attempts made to strengthen them through selected activities. Physical fitness components include:

1. **FLEXIBILITY** Ability to move the body joints through various ranges of movement to produce efficient movement and minimize injury.
2. **STRENGTH** Ability of a muscle or muscle group to exert force against a resistance.
3. **POWER** Ability to use strength to apply force for effective movement of a resistance.
4. **ENDURANCE** Ability to carry on sustained muscular effort over a period of time, through the postponement of fatigue.
5. **AGILITY** Ability to change the direction of movement swiftly, safely and easily, exhibiting good control of the body.
6. **SPEED** Quick, rapid, efficient movement, with respect to the individual's speed potential.

Summary

The reader is asked not to take the above discussions as negative opinions about the areas discussed. Each has merit, but the Project contends that they should not be taught to the retarded as separate instructional units, but can be taught and developed through the medium of other activities.

Fundamental Movement Patterns

Purposeful self-movement is essential to all physical activities in which an individual may participate, whether at work or play. It is the child's means of expression and communication. It is his way of learning about and using his body. He is able to increase his awareness of the movement capabilities of his body, as well as his awareness of the environment surrounding him. To be truly an educational experience, the teacher must guide the child in discovering movement, as well as promote within the child **both** quantity and quality of movement. Children must be given ample opportunity to explore and refine their own movement patterns creatively, in a variety of learning situations and with all types of equipment available for their use.

I. Fundamental Locomotor Patterns

Locomotor patterns commonly refer to those patterns involved in moving the human organism from one point to another, or to project the body upward, as in jumping or hopping. Locomotor skills may be categorized into even and uneven patterns.

WALKING Walking is a very basic skill which we use constantly as we move about in our daily tasks. Walking is learned early in the child's development and often children develop poor habits of walking which cause undue strain on the various body parts. The walking step is used alone or in combination with other locomotor movements in many physical activities.

1. BEHAVIORAL OBJECTIVE **Given instruction and demonstration in the correct mechanisms of walking, the child will demonstrate the ability to walk with the toes pointed straight ahead, the legs swinging freely from the hip, the heel touching the floor first, pushing off of the toes of the rear foot, body in an erect position, with the arms swinging in opposition to the legs.**

2. COMMON DEVIATIONS

   a. Lifting the body rather than pushing forward from the toes, resulting in a bobbing or bouncing walk.
   b. Failure to pick up feet, resulting in a shuffle or dragging walk.
   c. Walking with toes pointed in (pigeon-toed) or pointed out (duck walk).
   d. Hitting one foot with the other.
   e. Excessive swinging of the arms from side-to-side.
   f. Leaning forward, backward or to the side.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

   a. TRANSITIONAL STUDENTS Characteristic of the transitional or trainable child is his difficulty in moving in any direction other than forward and his problems with tasks involving movement with visual control. Also, many transitional students walk using a peculiar, awkward gait which makes them more noticeable in public. The instructor can help the transitional student improve his walking mechanics by allowing for opportunities to **walk:**

   —in different directions, other than forward.
   —using varying speeds or to a drum beat.
   —on tiptoes; on heels.
   —in a straight, zig-zag or circular pattern, making use of existing floor markings.
   —in good posture with efficient foot action.

—toward a full-length mirror, watching his reflection.
—in various low-organization games, such as Duck, Duck, Goose; Magic Carpet; Stepping Stones; Midnight; and Brownies and Fairies.
—in simple singing games, such as Farmer in the Dell or London Bridge.
—imitating various animals walking.

b. PRIMARY EDUCABLE STUDENTS Include all of the developmental activities mentioned for the transitional student, plus opportunities to **walk:**

—with stiff knees; toes pointed in; toes pointed out.
—with long steps; short steps.
—with a partner; staying in step.
—using no arm swing; an exaggerated swing.
—making imaginary letters or numbers on the floor.
—on a low balance beam, forward; backward.

c. INTERMEDIATE EDUCABLE STUDENTS All previously mentioned activities, plus opportunities to **walk:**

—creating patterns that combine changes in direction, height, intensity, or length of step.
—varying movement of the legs.
—in various marching routines.
—in simple relay races, involving variations of the natural walk.
—in more complex games and rhythms, such as Red Light, Green Light; Pop Goes the Weasel; Bingo; Yankee Doodle; and Gustafs Skoal (folk dance).

d. JUNIOR HIGH EDUCABLE STUDENTS When students have reached this age group, it is assumed that their walking is an accomplished skill. Some instruction may have to be given to individual students, emphasizing posture and correct mechanics of walking.

RUNNING Running is very similar to walking in that it is an even pattern movement. It differs from walking because there is a period of non-support in the run. Running is vital to many games which children play as well as to most sports.

1. BEHAVIORAL OBJECTIVE **Shown the proper mechanics of running, the child will demonstrate a correct running pattern, leaning the body forward, pushing off from the rear foot and stepping forward with the lead foot, landing on the ball of that foot. The arms are bent at the elbows and swing from the shoulders in opposition to the legs. The toes are pointed forward with the knees lifting higher as speed increases, with a rhythmic continuous movement.**

2. COMMON DEVIATIONS

a. Landing on heel of lead foot.
b. Running in a stiff upright position.
c. Failure to lift knees high.
d. No arm swing; exaggerated arm swing; arms not in opposition to legs.
e. Failure to watch forward, resulting in collisions with others or falling down when terrain changes.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Many of the transitional students will be overweight, uncoordinated or simply not motivated to run. Practice in running should be fun for this student, not tedious work or else he will balk at running. Practice sessions must be interspersed with frequent rest periods as he may show fatigue easily. Employ activities which allow the transitional student to **run:**

—in place, varying height knees are raised.
—without collisions with other runners.
—around or between objects.
—following a leader.
—in low organization games, such as Red Light; Run for Your Supper; Cat and Mouse; and Two Deep.
—on different surfaces, such as tile, cement, asphalt, grass, dirt and gravel.

b. PRIMARY EDUCABLE STUDENTS Primary students have an uncontrollable urge to run. Although they may tire easily, it is surprising how long a period they can run. Expose them to the previously mentioned activities, plus opportunities to **run:**

—fast, stopping suddenly, changing direction without losing speed or balance.
—in low-organization games that require dodging, tagging, pursuit, such as Black Tom; Frozen Tag; Hill Dill and Pom Pom Pullaway.
—through a turning long jump rope.
—with a partner or group.
—in simple relay races or dashes.

c. INTERMEDIATE EDUCABLE STUDENTS Greater emphasis can be placed on correct form and on running for speed and distance. Use all previous activities plus opportunities to **run:**

—in lead-up activities to team sports.
—for increasingly longer distances each day.
—combining run with other locomotor skills, such as run and leap or run and jump.
—at varying speeds, including jogging.
—on varying terrain, uphill, downhill and cross-country.

d. JUNIOR HIGH EDUCABLE STUDENTS Make certain all previous running activities have been taught and accomplished to some degree of proficiency. Stress importance of **running:**

—in various team sports.
—competitively, whether simple relay races or complex track and field events.
—while manipulating an object, such as dribbling a basketball, carrying a football, etc.

LEAPING Leaping is similar to running, except that in a leap, the ankle and knee actions are increased to obtain a more upward motion. The leap is usually combined with the run. It is used when a slight obstacle must be cleared without breaking the running stride.

1. BEHAVIORAL OBJECTIVE **Having mastered an adequate pattern of running and given instruction in the pattern of leaping, the child will perform leaping movements by increasing ankle and knee actions, resulting in a more upward motion than used in running. The knee leads out and the leg is stretched forward as the foot reaches out for the landing, the rear leg extended backward after a vigorous push-off from the ground, arms moved upward to sustain the body in the air, the take-off being from one foot and the landing on the other foot, immediately returning to the running pattern.**

2. COMMON DEVIATIONS
   a. Failure to propel the body into the air.
   b. Failure to suspend the body in the air.
   c. Failure to reach out with the lead leg, resulting in short leaps.
   d. Failure to include arm motion.
   e. Landing on both feet instead of one, resulting in a disrupted pattern.
   f. Landing off-balance due to lack of control of the suspended body.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Because of their apparent problems with balance and agility, the transitional student will often experience great difficulty in mastering the run and leap concept. Most often, they will come to a complete halt in their running movement and take-off from both feet, landing on both feet, as in hopping. Another common problem is a stop in the running pattern and then simply a **step** over the obstacle, returning to running. Allow opportunities to **leap:**

   —mimicking animals, such as deer, antelope, etc.
   —starting with a walking pattern, stepping over a low obstacle and returning to a walk, gradually increasing the height of the obstacle and the speed of the walk until a run and leap can be performed.
   —over a stationary rope lying on the floor; then a wiggling rope (snake) to an oscillating rope (ocean waves).
   —varying the take-off foot.

   b. PRIMARY EDUCABLE STUDENTS The leap is difficult for this group to accomplish. Thus, most emphasis will be placed on practicing the leap itself with variations in height and distance. Provide opportunities for **leaping:**

   —after running with increasingly longer strides.
   —in low-organization games, such as Jump the Brook or Jack Be Nimble.
   —in rope jumping activities, such as Jump the Snake; Jump the Fence; Jump the Waves; and leaping over turning simple rope while running.
   —over evenly spaced, uniform height obstacles to hurdle without breaking the rhythm of the run.

   c. INTERMEDIATE EDUCABLE STUDENTS Increase the complexity of the leaping pattern. Introduce lead-up activities to sport skills requiring the use of a leap. Stress **leaping:**

   —for height over increasingly higher obstacles.
   —for distance across increasingly wider spans.
   —without running steps between leaps.
   —with take-off foot on elevated surface, such as mini-tramp, landing on a mat, continuing the run.
   —over obstacles strategically placed in a confidence course.
   —related to sports skills, such as hurdling in track, scissors high jump etc.

   d. JUNIOR HIGH EDUCABLE STUDENTS By the time students have reached this age group, the leaping movement should be fully developed with only refinement of the mechanics necessary. However, individual assistance may have to be given where indicated.

JUMPING Jumping is a motion involving a take-off from one or both feet, a momentary suspension in mid-air, followed by a landing on both feet. Many games require a jump stop when running is followed by a quick stop when one needs to maintain balance. Children jump over objects, down from elevated objects and up to elevated objects. Track events involving jumping include the running broad jump and the high jump. Many team sports require a jump-and-reach motion. Any sport requiring an object to be thrown, hit or caught involves a jumping movement.

1. BEHAVIORAL OBJECTIVE **Given an obstacle to clear or a tangible distance to span and instructed in the proper jumping pattern, the child will demonstrate the ability to jump by taking off from one or both feet from a static or dynamic crouch position, gaining power by sudden thrusting action of the legs against the surface and a strong arm swing in the direction of the jump; suspending the body momentarily in mid-air, then dropping back to the ground to a balanced landing, the weight absorbed by both feet with a springing action of the knees.**

2. COMMON DEVIATIONS

a. Landing on the heels instead of the balls of both feet.
b. Failure to bend the knees to cushion the shock of landing.
c. Failure to swing arms in direction of the jump.
d. Failure to bring the legs up to clear the ground with the feet.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Jumping activities must be kept at the extremely simple levels. Most emphasis will be placed on jumping down from an elevated surface or jumping over very low obstacles. Provide experiences for **jumping:**

—down from elevated surfaces one to two feet in height.
—to dodge a rolled or thrown ball.
—over low obstacles from both a stationary take-off and a moving take-off, either walking or running.
—for distance from a standing or running take-off.
—in place, varying the height of the jump.

b. PRIMARY EDUCABLE STUDENTS Many of the same activities used with the transitional student will be taught at this level. The difference will be in the demands placed upon the primary student in terms of height and distance. Allow for **jumping:**

—with increasing speed or tempo.
—in and out of objects, such as hoops, tires, geometric designs painted on playing surface.
—up to reach an elevated target, touching it with the hand, such as jump-and-reach test; or grasping it and hanging from it as found in playground apparatus.
—in simple games, like Hopscotch, stunts and tumbling, Dodgeball.

c. INTERMEDIATE EDUCABLE STUDENTS At this level, jumping may be combined with other locomotor skills to form the basis for sports skills. Review all previous jumping experiences and introduce activities to **jump:**

—rhythmically and continuously in place for a specified number of jumps. Repeat, moving about and changing direction.
—in simple game situations, like Jump the Shot and Leap Frog.
—in unison with a partner.
—vertically up into the air, touching an object held high or making a chalk mark on a jump-and-reach test.
—down from heights, such as off elevated surfaces or dropping off apparatus.
—in seasonal sport activities involving jumping, such as the high jump and running broad jump in track and field.

d. JUNIOR HIGH EDUCABLE STUDENTS Evaluate jumping ability of students at this level. Correct any deviations from correct jumping form. Challenge them through self-testing activities, competitive long and high jumping contests and emphasize the jumping patterns found in seasonal sports, such as jumping and shooting a basketball, jumping to catch a thrown ball and jumping to strike a volleyball.

HOPPING Hopping is usually used in combination with a jump or walk in rhythm and sports activities.

1. BEHAVIORAL OBJECTIVE **Given the task and activity requiring a hopping movement and after adequate instruction in the mechanics of hopping, the child will exhibit the ability to hop, pushing the body into the air from a one-foot take-off and after a slight suspension in the air, returning it to the floor, the inactive leg held off the floor, in a balanced landing.**

2. COMMON DEVIATIONS

a. Taking off from one foot, landing on the other.
b. Twisting or bending the body in mid-air.
c. Touching inactive foot to floor to maintain balance.
d. Landing on the heel, rather than the ball of the active foot, resulting in a jarring, heavy landing.
e. Losing the balance after landing.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS This type student has extreme difficulty in hopping correctly, largely due to a failure to understand the concept of taking off and landing on the same foot. Most time will be spent on developing this concept.

Allow ample opportunities to **hop:**

—developing the natural skill by observing correct mechanics.
—after first learning to balance on one foot like a stork.
—first on one foot for a specified number of times; then on the other foot.
—in various directions, if correct hopping technique has been mastered.

b. PRIMARY EDUCABLE STUDENTS After the correct mechanics of hopping have been accomplished, variations in hopping can be introduced by **hopping:**

—in place, turning the body in all directions; varying the tempo of hops.
—along a line on the floor.
—holding the inactive foot.
—combining the hop with a step as in skipping or galloping.
—to improve endurance and strength of the foot and leg.

c. INTERMEDIATE EDUCABLE STUDENTS Hopping skills learned previously may be combined with other locomotor movements. Activities should allow for **hopping:**

—over obstacles; in-and-out of objects such as hoops, tires, boxes, etc.
—in simple relay races.
—in various self-testing stunts, combatives and low-organization games.
—along an elevated surface, as on a balance beam.
—with a changing direction, tempo and pattern.
—in rhythmical activities such as simple singing games and folk dances.

d. JUNIOR HIGH EDUCABLE STUDENTS It may be expected that at this level, hopping as a skill has been accomplished. Vary activities to allow for **hopping:**

—through complex patterns found in many rhythmic activities.
—in competition with classmates, such as in the hop-step-jump for distance in track.

SLIDING A slide is an uneven movement pattern which combines a step and a leap. This sideward movement is essential to many sports activities, especially in defensive footwork in basketball and the lateral movements of a defensive halfback in football. It allows one to more efficiently in a balanced manner and to be ready for sudden changes of direction and actions, such as found in volleyball, tennis, badminton, softball and baseball.

1. BEHAVIORAL OBJECTIVE **After understanding of the mechanics of walking and leaping and having had instruction in sliding, the student will demonstrate the ability to slide, a combination of a long opening sideward step and a short sideward closing leap without any alternating of sides.**

2. COMMON DEVIATIONS
   a. Failure to transfer body weight to following foot.
   b. Leaping too high and not gaining distance laterally.
   c. Performing the movement in a flat-footed manner.
   d. Rotating the trunk, losing balance and tripping.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS It can be expected that the transitional student will be able to master the sliding pattern. As to whether or not the student can transfer the sliding sideward movement to a forward galloping movement, only trial-and-error will show. Teach basic **sliding:**

   —sideward to the right; then left, with the aid of footprints drawn on the floor or with the class mirroring the instructor's demonstration.
   —sideward in either direction, holding hands with a partner.
   —sideward in either direction, as a group with hands joined in a closed circle formation.

   b. PRIMARY EDUCABLE STUDENTS Cover basic sliding mentioned above and supplement with activities which allow the child to **slide:**

   —sideward, then forward, then backward in a box-step pattern.
   —in a circular, zig-zag or diagonal direction.
   —varying the lift of the closing leg.
   —varying the speed of lateral movement.
   —imitating an ice skater.
   —as part of simple folk dances, such as Carousel, Chimes of Dunkirk or A Hunting We Will Go.

   c. INTERMEDIATE EDUCABLE STUDENTS Review basic sliding pattern with more complex activities requiring that the child **slide:**

   —as part of more complicated folk dances, such as Paw, Paw Patch, Oh Suzannah, and Pop Goes the Weasel.
   —as part of lead-up preparation to sport skills necessary for such sports as basketball,

volleyball, badminton and softball.
—with an emphasis on smoothness and gracefulness.

d. JUNIOR HIGH EDUCABLE STUDENTS Most emphasis will be placed upon practical use of the **slide:**

—in combination with other locomotor skills which are essential to proficiency in seasonal sport skills.
—as part of the movements necessary for such dances as Virginia Reel, Pattycake Polka, Cshebogar and the Box Waltz.

GALLOPING Galloping incorporates the uneven pattern found in sliding with forward or backward movement. It is commonly seen in small children who have not mastered the skip. Imaginative play such as imitating horses and many rhythmic activities require the ability to gallop.

1. BEHAVIORAL OBJECTIVE **Following practice and some degree of proficiency at sliding and after instruction in galloping, the child will demonstrate the ability to gallop, a variation of the slide, performed as a long step and a short leap, with no alternating of the leading foot, performed in either a forward or backward direction.**

2. COMMON DEVIATIONS

a. Failure to transfer the weight to the following foot.
b. Galloping using a step and a leap which is too short and not gaining distance.
c. Incorrect landing on the following foot, resulting in a jarring movement.
d. Alternation of leading and following foot resulting in a skipping movement.
e. Failure to maintain balance.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Through the observation of and the experience of teaching transitional students, it is the premise of this publication that most transitional students will not go beyond the gallop as a lead-up to skipping. Most will master the gallop in a forward direction, a few will progress to the skip which requires an alternation of lead and follow feet.

Provide opportunities to **gallop:**

—while imitating animals, such as a horse.
—in a follow-the-leader manner.
—in a low-organization game by modifying the required pattern of movement.
—to music or to the beat of a drum.

b. PRIMARY EDUCABLE STUDENTS With a few exceptions, the primary student should be able to accomplish the galloping movement. Include previous activities, plus activities which allow the child to **gallop:**

—varying his speed of movement.
—varying his direction of movement.
—varying the length of the step and leap.
—holding hands with a partner.

c. INTERMEDIATE EDUCABLE STUDENTS Individual work may have to be done with some of the students to refine the gallop to a smooth, graceful performance. Introduce more complex rhythmical activities which require the gallop.

d. JUNIOR HIGH EDUCABLE STUDENTS Provide instruction only where and if essential to other skills.

SKIPPING Skipping is similar to sliding and galloping in that it is an uneven pattern involving the step with a hop, accompanied by an alternation of sides. The skip pattern is essential in most games and seasonal sports where sudden stops and changes of direction are required. A skip stop is useful for quick stops and regaining of balance. The skip step precedes many tumbling activities such as the cartwheel and it is also the step necessary in many folk and square dances.

1. BEHAVIORAL OBJECTIVE **Having mastered the patterns of walking, hopping, sliding and galloping and following instruction in the mechanics of skipping, the child will exhibit the ability to skip, stepping forward on one foot, hopping once on it.**

2. COMMON DEVIATIONS

a. Stepping with lead foot and hopping on trail foot as in a gallop.
b. Not lifting the leg upward, resulting in too long a skipping pattern.

c. Not allowing the arms to swing up, naturally, in opposition to the legs.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS As previously stated few, if any, of the transitional students will master the skip. If some appear ready to learn the skip, much time must be spent individually, starting with a simple step and a hop on that foot and then a step with the other foot and a hop on that foot. Perhaps footprints painted on the floor will aid the transitional child to learn the skip.

b. PRIMARY EDUCABLE STUDENTS As with the transitional students, much individual instruction will have to be given the primary student. Since skipping or combinations of it with other locomotor patterns are so important to successful participation in many seasonal sports, tumbling and rhythmics, it is essential that skipping be taught at this level. Provide opportunities to **skip:**

—beginning with a delayed walk-through teaching method, holding the child's hand and having him walk through the pattern of skipping.
—as part of low-organization games, such as tag or relays.
—as required by simple singing games, such as Lobby Loo, A Hunting We Will Go and The Muffin Man.

c. INTERMEDIATE EDUCABLE STUDENTS Further refine skipping pattern developed at primary level, checking for consistency and rhythm. Stress grace and smoothness of performance in **skipping:**

—in various directions, levels and tempos of movement.
—as part of more complex rhythmics, such as folk and square dances.
—as a basis for performance of sport skills as skip-stopping, changing direction, pivoting and tumbling routines.

d. JUNIOR HIGH EDUCABLE STUDENTS When students have matured to this level, skipping should have been learned. Allowances must be made for individual differences and for poor skipping mechanics as observed in rhythmic activities or in seasonal sports participation.

LANDING Anytime the human organism is propelled into space, whether up for height, up and out for distance or down from an elevated position, there must be present in the child an ability to land properly and safely. All seasonal sports, apparatus activities and many rhythmic activities require an ability to land. The downward force of the body weight must be absorbed by the balls of the feet, the ankles and knees bend and the arms aid in regaining balance.

1. BEHAVIORAL OBJECTIVE **Engaging in an activity where the body is momentarily suspended in mid-air and given adequate instruction in the proper and safe way to land, the child will be able to land from his airborne position by landing on the balls of his feet, bending his ankles and knees to absorb the force and to decelerate the momentum in a gradual manner. The arms are extended sideward to regain balance with the upper part of the body held erect, looking in the direction of the next movement.**

2. COMMON DEVIATIONS

a. Landing flat-footed resulting in a hard, jarring landing.
b. Failure to bend ankles and knees to absorb the force and momentum.
c. Landing with too small a base of support resulting in a fall.
d. Looking down at the floor or landing surface.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS While able to master a safe landing after a small hop or jump into the air, these students have difficulty with correct landing, as observed by their tendency to run up to an obstacle, stopping and stepping over it, or stepping down from an elevated surface rather than jumping down. When hanging by the hands from a piece of apparatus, they resist letting go, possibly due to fear of landing improperly, resulting in a fall. Much time should be spent teaching them to **land:**

—following a vertical hop into the air; consecutive hops.
—following a jump down from a low elevated surface.
—following a release of their grasp on apparatus.

—after jumping over a low obstacle.

b. PRIMARY EDUCABLE STUDENTS This group of active youngsters engage in many activities requiring a proper landing. Landing skill may be developed through the experiences listed above, plus opportunities to **land:**

—after jumping vertically, increasing the height of each jump.
—jumping down from increasingly higher surfaces.
—following jumping or leaping activities found in simple games.
—after jumping over obstacles of varying heights.

c. INTERMEDIATE EDUCABLE STUDENTS If proper teaching of landing has been accomplished at the primary level, the instructor will merely have to remind the intermediate student of the dangers inherent in the various physical education activities in which he engages. Individual instruction may have to be given when improper landing techniques are observed.

d. JUNIOR HIGH EDUCABLE STUDENTS As with the intermediate age group, the increasing complexity of the activities to which the junior high student is exposed may require precautionary measures to insure proper and safe landing techniques.

STOPPING All locomotor movements require the skill of stopping at the conclusion of the movement. There are actually two methods of stopping, the running stride stop and the skip stop.

1. BEHAVIORAL OBJECTIVE **Engaging in a locomotor movement pattern, the student will exhibit the ability to stop at the conclusion of the movement by either employing the running stride stop, where the feet are in a forward stride position with the knees bent, leaning the body backward to reestablish balance; or using a step and a hop before the actual stop, carrying the weight back and taking it on the balls of the feet.**

2. COMMON DEVIATIONS

a. Failure to bend the knees to absorb momentum.
b. Allowing the momentum of the body weight to continue forward, requiring additional steps before the stop is made, due to loss of balance.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Much work will have to be done to teach the transitional student to stop following completion of a movement pattern. Balance problems, inaccurate perceptual-motor competencies and many other factors enter into the teaching of **stopping:**

—after various locomotor movements at a verbal signal — whistle, voice, clap.
—at a specified point, such as a line, dot or square following locomotor movement.
—to avoid collisions with another child or an obstacle.

b. PRIMARY EDUCABLE STUDENTS Active play habits, often without abandon, require that primary students learn the how and why of stopping. Teach them to **stop:**

—at an auditory or visual command.
—to avoid collisions resulting in bodily harm.
—following movements inherent in various low-organization games.
—before running out of boundary lines guiding simple games.

c. INTERMEDIATE EDUCABLE STUDENTS The ability to stop should be mastered by the students who have reached this level of maturation. Observable deviations should be treated individually. Include activities which require **stopping:**

—after locomotor movements in various directions, at various speeds and tempos.
—to stay within game boundaries.

d. JUNIOR HIGH EDUCABLE STUDENTS Further refine stopping techniques, seasonal sports and games. Correct faults when observed.

PIVOTING The pivot is used to change direction efficiently when in a stationary position or following a stop at the conclusion of a locomotor movement and prior to the initiation of that movement or of a new locomotor movement in a different direction. The pivot is essential to all sports when a quick, smooth change of direction is required. Many dances require a pivot or reverse turn. Gymnastic activities incorporate pivots with a variety of bases of support.

1. BEHAVIORAL OBJECTIVE **Required to change direction of movement quickly, the student, after instruction, will accomplish the change of direction by pivoting, using one foot as the base of support as he pushed off from the floor with the other foot in the desired direction, keeping his weight on the pivot foot. When required, the student will demonstrate the ability to perform a reverse turn, pivoting on the balls of both feet, spinning to the rear, distributing the weight on both feet, knees bent, body weight low. Similar principles are followed when the base of support is another part of the body, such as the hand.**

2. COMMON DEVIATIONS
   a. Failure to keep the pivot foot stationary.
   b. Failure to place the body weight on the pivot foot or to distribute it to both feet in a reverse turn.
   c. Attempting to spin on the whole foot rather than on the ball of the foot.
   d. Failure to maintain body balance throughout the pivot.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS When required to change the direction of a locomotor movement, this group often tends to make little use of a pivot or reverse turn. They will move in a circular pattern to accomplish a change of direction or will come to a complete stop, hesitate and then initiate movement in a new direction. Allow opportunities to **pivot:**

      —using the ball of one foot as the pivot point and walking the other foot around it.
      —following oral commands to change direction.
      —imitating demonstrated changes of direction.
      —using the hand as the pivot point and walking the legs around as used when performing the Coffee Grinder stunt.
      —using the hips as the pivot point.
      —in place using both feet as pivot points.

   b. PRIMARY EDUCABLE STUDENTS Stress importance of pivoting to make quick changes of direction, as required by running games. Include activities requiring a **pivot:**

      —to change direction before colliding with obstacles in a confidence course.
      —as part of the rhythmic activity, such as Looby Loo and the Hokey Pokey.
      —to maintain line position in a follow-the-leader game.

   c. INTERMEDIATE EDUCABLE STUDENTS If pivot has been mastered for simple activities, introduce complex activities requiring a **pivot:**

      —as part of a locomotor movement, leading up to competency in sports skills, such as the pivot in basketball.
      —as part of rhythmic activity requiring the pivot as part of its movement pattern.
      —to correctly perform a self-testing stunt.

   d. JUNIOR HIGH EDUCABLE STUDENTS Further refine the pivot movement as required in various sports and rhythmic activities. Stress smoothness and gracefulness for efficient performance of the pivot. Provide individual instruction where necessary.

DODGING Dodging is essential to all games and sports where evading an opponent is a necessary part of the game. The skill of dodging incorporates the previously learned techniques of stopping and pivoting.

1. BEHAVIORAL OBJECTIVE **Given an obstacle or opponent in the path of movement to evade or avoid, the student will exhibit the ability to terminate movement and change its direction, by bending the knees, lowering the body's weight and shifting its weight in a new direction.**

2. COMMON DEVIATIONS
   a. Failure to bend the knees.
   b. Failure to stop forward momentum by not shifting the body weight back and then in a new direction.
   c. Failure to initiate the movement quickly in the new direction, resulting from holding the stopping action too long.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Saddled with balance and agility problems, the transitional student will encounter difficulty in mastering the dodge. Typical of this student is his slow reaction time and possible inadequacies in stopping and pivoting. Allow him to **dodge:**

      —a rolled ball as in Dodge Ball.
      —an opponent as in simple tag games.
      —a thrown object as in Ball Tag.

   b. PRIMARY EDUCABLE STUDENTS Primary students thrive on large-muscle activities which involve evasion of a tagger or evasion of a thrown object. Teach them to **dodge:**

      —to avoid colliding with an obstacle or another student, first by having them walk around the room without touching another person, then running.
      —to avoid being tagged as in low-organization games such as Black Tom, Cat and Mouse, Hill Dill and Frozen Tag.
      —to avoid being hit by a thrown object such as found in Dodgeball and Ball Tag.

c. INTERMEDIATE EDUCABLE STUDENTS The ability to dodge becomes important at this age. All of the previous activities may be reviewed, plus the importance of **dodging:**

—to evade an opponent while manipulating an object, such as dribbling a basketball, carrying a football or moving a hockey puck down the floor.

—to avoid bodily harm by colliding with an opponent or obstacle in the path of movement.

d. JUNIOR HIGH EDUCABLE STUDENTS Carefully observe their play in all game and seasonal sport activities. Where necessary, stop play to emphasize the importance of dodging or to correct deviations from correct dodging.

FALLING . Inherent in all locomotor and non-locomotor movement is the possibility of losing one's balance and falling to the playing surface. Largely, as a safety measure in all activities, it is essential that children be taught to fall safely.

1. BEHAVIORAL OBJECTIVE **Understanding the potential hazards found in all activities and the possibility of losing one's balance or grip and given instruction in the safe way to fall, the student will exhibit this knowledge and skill by taking a fall on the padded parts of his body-hips, buttocks, thighs or back of the shoulders, avoiding a direct fall onto the head, elbows or knees; and absorbing the shock of the fall by relaxing to enable his joints to give with the impact.**

2. COMMON DEVIATIONS
   a. Failing to relax the body to absorb the shock or impact.
   b. Failure to fall on protected parts of the body.
   c. Reaching out with rigid arms and hands to stop the fall, presenting a danger of fracturing.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Balance problems, with the accompanying possibility of falling and being injured, prevents many transitional students from exploring and attempting new skills and activities. It is therefore essential that they learn to **fall safely:**

   —from a kneeling position forward onto a padded surface, learning to absorb the shock of the fall, by bending the wrists and elbows as the hands make contact with the surface.
   —backward from a seated position or to either side.
   —sideward from a hands and knees position.

   b. PRIMARY EDUCABLE STUDENTS Review methods used with transitional students and introduce activities which involve **falling:**

   —as related to the mechanics of tumbling in forward, backward and sideward directions.
   —as part of mimetic play such as, a rolling ball, a falling tree, a leaky balloon or a melting ice cube.

   c. INTERMEDIATE EDUCABLE STUDENTS Contnue to stress safety in participation in the various activities. Indicate to these children what portions or stages of activity might result in a fall. Relate falling to various lead-up and sport skills. Provide individual instruction in falling properly where needed.

   d. JUNIOR HIGH EDUCABLE STUDENTS Correct and safe falling habits should be present in all activities presented. As with intermediate students, some individualized instruction may be necessary.

CRAWLING Crawling is a basic locomotor pattern which normally precedes the development of walking in children. Even after having mastered the ability to walk, the child reverts to crawling in many play situations. He likes to crawl or move on "all fours." Unlike other locomotion movements, crawling uses four bases of support, both hands and both knees or lower legs.

1. BEHAVIORAL OBJECTIVE **Understanding the basic mechanics of a correct crawling pattern and given a task involving the use of the crawl, the student shall demonstrate crawling ability by moving forward in an alternating four point gait, the order of contact with the floor being, left hand-right leg, right hand-left leg and repeating this sequence. The crawl should be rhythmical and even, the back kept level, head looking forward, with the total movement forward.**

2. COMMON DEVIATIONS
   a. Leads with same side in a left hand-left leg, right hand-right leg pattern, causing a swaying motion.
   b. Using one side more than the other resulting in a circular crawl.
   c. No alternation of limbs, characterized by moving both hands forward, then both legs in a "rabbit hop" manner.
   d. Sliding or dragging a limb.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Many transitional students will exhibit the previously mentioned deviations in the crawling pattern. Since alternation and opposition are so essential to many locomotor patterns, it is important that these be de-

veloped. Allow the students to **crawl:**

—under, between and around obstacles.
—both fast and slow.

b. PRIMARY EDUCABLE STUDENTS Further check these students for alternation and opposition of limbs. Allow experiences in crawling as done with transitional students.

c. INTERMEDIATE AND JUNIOR HIGH EDUCABLE STUDENTS Assess and correct any deviations in alternation and opposition observed in other locomotor movement patterns.

CLIMBING Climbing is a movement pattern similar to crawling in that similar alternation and opposition movements are used. They differ in that climbing requires a pulling of the weight by each limb, while crawling requires a pushing of the body weight.

1. BEHAVIORAL OBJECTIVE **Presented with the problem of scaling a ladder or other similar device and having mastered the alternation and opposition movements of crawling, the student will climb the device, using all four limbs, alternating and opposing them, pulling with the arms and pushing with the legs, body facing the direction of climb, in a rhythmical and even manner, climbing down as well as up.**

2. COMMON DEVIATIONS
   a. Losing one's grip or missing a step.
   b. Leading with one side while climbing up or down.
   c. Straining and struggling.
   d. Failure to use all four limbs.
   e. Bumping one limb with another.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Most climbing practice will be done on stairs, ascending and descending, with an emphasis on holding the hand rail. Transitional students characteristically exhibit a failure to alternate steps as shown by stepping up with one foot, pulling the other foot up to that step, stepping up with the same lead foot, etc. Practice **climbing:**

      —by first stressing alternation and opposition of limbs on a level surface.
      —up increasingly steeper inclines, forcing a pushing of the body against gravity.
      —up and down stairs with varying sizes of rise and tread.
      —up and down wall mounted stall bars, using both the hands and feet.

   b. PRIMARY EDUCABLE STUDENTS Inherent in these children is a desire to climb, whether upstairs to see what's at the top, up ladders, apparatus or even trees and ropes. Review alternation and opposition taught to transitional students and provide opportunities to **climb:**

      —up and down stall bars, skipping rungs.
      —up inclines on "all fours" of increasingly steeper angles.
      —up, down, over and across jungle gym type equipment and other apparatus found in the school.
      —up and down vertically hung climbing ropes using both the hands and legs alternately, not in opposition.

   c. INTERMEDIATE EDUCABLE STUDENTS Difficulty of climbing activity can be increased for this age student. If able to accomplish the activities described for the primary student, allow practice in **climbing:**

      —up stall bars, using both hands and feet; down using only the hands.
      —up and down ladders, beginning with rigid ladder, then to a rope ladder and possibly to a cargo net.
      —using only the hands, suspended from a horizontal ladder.
      —hand over hand along a horizontal bar, while suspended off the ground.

   d. JUNIOR HIGH EDUCABLE STUDENTS Increased strength and endurance should enable these students to climb easily, if they have mastered the mechanics of climbing. Provide complex activities in **climbing:**

      —to greater heights up and down ladders.
      —for greater distances along a horizontal ladder or bar.
      —up and down a vertical rope, using only the hands.

II. Fundamental Non-Locomotor Patterns

Non-locomotor patterns are movement patterns characterized by movement of the body or its parts in different ways while remaining in the same place. Static or stationary posture can also be included as a non-locomotor pattern. Maintaining a position in space and a relationship to gravity in an erect position involves balance patterns. As long as some part of the body is not supported by a static surface, a balance or non-locomotor pattern is in use. Lying flat on a surface does not require a major balance pattern or a non-locomotor pattern, but all other positions do.

Although balance patterns are non-locomotor or without movement through space, they are an essential part of locomotor patterns and object manipulation patterns, since they aid in maintaining equilibrium throughout action.

STANDING Standing is a balanced non-locomotor pattern in which the body is sustained in as comfortable an erect position over both feet as possible. Body parts or segments are held in vertical alignment as nearly in line with the line of gravity as possible. Constant slight muscular movements forward and back and from side-to-side help maintain the body in its erect position.

Standing includes any position in which the body is balanced in an erect manner over the feet whether on both feet, one foot or shifting from one foot to the other. Efficient standing posture is a matter of placing the body as whole and its parts one in relation to the other so that a minimum of muscular effort to oppose the force of gravity is needed. Good standing posture should be an easy position, not a stiff one, a position in which the normal physiological curves of the body are natural, not forced into a straight vertical line.

1. BEHAVIORAL OBJECTIVE **Given instructions and shown correct body mechanics of the standing pattern, the child will assume an acceptable standing position, toes pointed forward, weight evenly distributed on the balls of the feet and heels, knees relaxed, abdominal wall flattened yet relaxed, lower back curved naturally, not exaggerated, the shoulders back and relaxed, the chest up and raised, head up, chin in, neck back with the ears directly over the point of the shoulder.**

2. COMMON DEVIATIONS

   a. A zig-zagging of body segments one upon the other instead of maintaining good alignment

with the force of gravity.

b. Body weight carried off center to the base of support, such as buttocks protruding, abdomen forward, shoulders back, feet too close together and a tilt to one side.
c. Knees locked rigidly or excessively extended.
d. Head forward or tilted to one side.
e. Pelvic area twisted or tilted to one side.
f. Weight on heels or toes, rather than on whole foot.
g. Sudden jerky muscular movements to maintain body segment alignment.
h. A stiff rigid standing pattern.
i. Inability to stand still, demonstrated by shifting of weight from one foot to the other or movement of the feet.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Poor muscle tone, muscular strength and endurance and possibly the formation of incorrect standing patterns at an earlier age may cause the transitional student to demonstrate an improper standing pattern. Fatigue may also cause this child to have a poor standing posture. Activities should be provided to enable the transitional student to develop and strengthen the muscles essential to maintaining an erect standing pattern. Include opportunities for the student to observe examples of good standing patterns in others, to observe himself in a full-length mirror and if possible make use of photographs or video tapes so that he can see himself and note the problems which he may have.

b. PRIMARY EDUCABLE STUDENTS As with transitional students, correct standing pattern mechanics need to be developed and maintained. Severe problems will need much work. The child should develop the feel of a good standing pattern. Activities involving emphasis on good posture while standing should be included.

c. INTERMEDIATE AND JUNIOR HIGH EDUCABLE STUDENTS Continually observe the students at play or while resting for any severe problems in standing patterns and provide individual aid where needed.

SITTING Sitting is essentially the same as standing except for the base of support. In standing the base of support is the feet, but in sitting it is the seat and often also the feet.

Sitting consists of the same factors in combination as found in standing: good body mechanics and a slight but definite postural sway. The sitting pattern is basically the same whether the child sits on a object or on the floor.

1. BEHAVIORAL OBJECTIVE **Given demonstration on the postural mechanics, the child will exhibit the ability to sit properly, trunk reasonably erect, his weight evenly distributed to both sitting bones, his lower back supported where such support is available and with a minimum of slumping and straightening motions. The chest should be lifted high enough to allow easy deep breathing.**

2. COMMON DEVIATIONS Sitting pattern deviations will parallel those for standing, except that the supporting base is different and fewer body segments need to be controlled.

a. Carrying the body weight on the base of the spine rather than evenly on the two sitting bones.
b. Failure to use support for the lower back where available.
c. Dropping the head forward or to one side.
d. Compressing the chest, caused by bending the trunk forward in the middle.
e. Leaning to one side.
f. Slumping, followed by jerky movements to return to erect position.
g. Any other deviation from constant reasonable erectness and easy balance.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Such students need to be taught the correct mechanics of good sitting posture. Too often they have had to spend great deals of time sitting on chairs or benches or on the floor with little to do. Slumping and rocking motions forward and back are typical of this student. Since they will not use the sitting pattern often in physical education, the classroom teacher must be made aware of good sitting patterns. The physical educator can correct deviations when observed in physical education activities which involve sitting. Allow for opportunities to **sit:**

—in chairs of varying heights or with varying amounts of back support.
—on stools or benches of varying heights without back support.
—on the floor, varying the leg positions from crossed to straight out in front, to a spread eagle position.
—on chairs or couches, with both hard surfaces and extremely soft surfaces.
—on inclines with the feet elevated or the sitting bones elevated.

b. PRIMARY EDUCABLE STUDENTS A tendency to be restless may cause these students to exhibit improper sitting postures. Opportunities to sit on elevated objects of varying heights with or without back supports should be provided. Have these children sit while listening to instructions or watching demonstrations. Observe and correct any apparent deviations. Involve the classroom teacher.

c. INTERMEDIATE AND JUNIOR HIGH EDUCABLE STUDENTS Proper sitting patterns should be established by the time children reach this level of maturity. However, continual observation of the student, whether sitting in chairs, on benches or on the floor, must be made with corrections where necessary.

BENDING Bending is movement around a joint where bones join together. Bending movements may be small, such as bending the fingers, or they may be large, as in bending the body at the waist.

Bending of certain body parts is essential to most locomotor skills used in the performance of dance, sports, apparatus and aquatic skills as well as daily tasks. Bending is one of the most basic body positions and patterns, since the fetal position is a bent or curled position.

1. BEHAVIORAL OBJECTIVE **Given the opportunity for and a demonstration of bringing one part of the body nearer to another, one being stabilized, both being free, occurring at a single joint or as a result of a change in the alignment of several joints, the child will exhibit the ability to bend.**

2. COMMON DEVIATIONS

a. Inability to bend at will to the extent desired without having to watch the body part visually.
b. Twisting the body or its parts to one side in order to move them.
c. Failure to bring the two body parts together without a wandering movement.
d. Jerky bending movements, indicating lack of muscular control.
e. Poor visual control resulting in a bumping of one body part into another.
f. Stiffness in one body part or in the entire body.
g. Extreme concentration on the bending movement.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Often anatomical restrictions, such as lack of flexibility or joint malformation, inhibit the transitional student's ability to bend. Their lack of agility in performing locomotor movements may be attributed to stiffness of body joints or inability to bend. Provide opportunities to **bend:**

—at major joints, such as at the waist, knees, elbows, hips and shoulders, while lying down to eliminate the problem of maintaining erectness and balance.
—at the major joints while sitting or standing.
—as part of mimetic activities.
—as part of movement exploration activities, such as making oneself as small as possible.

b. PRIMARY EDUCABLE STUDENTS As the complexity of locomotor patterns increases, so does the necessity to bend body joints. Combinations of locomotor patterns may be worked out to require bending of all joints of the body, whether individually or simultaneously. Include **bending:**

—at joints involving gross muscle action.
—at joints involving fine muscle action.
—at body parts while airborne, such as after a jump or leap or a rebound jump from a trampoline.
—as required to perform self-testing and tumbling stunts.
—in movement exploration activities.
—as part of basic rhythmic movements.

c. INTERMEDIATE AND JUNIOR HIGH EDUCABLE STUDENTS. Ability to bend as demonstrated by this age group should only be restricted by lack of flexibility or joint abnormalities. Relate bending to locomotor patterns necessary to perform basic sport, apparatus, rhythmic and aquatic skills.

STRETCHING Stretching involves the continued straightening or extension of body joints and parts beyond the straight line or expanding the parts into a longer space along a straight line. Stretching may occur at any of the body joints in various combinations. Stretching to full extension is usually preceded by a

bending or flexing movement. Many daily tasks requiring a reaching for objects utilize stretching. Most sport skills incorporate stretching to obtain maximum force, distance and speed in actions. Rhythmic skills use stretching in factors of time and positions and as expressive or creative movement.

1. BEHAVIORAL OBJECTIVE **Given the problem of performing a locomotor or non-locomotor movement involving the use of stretching, the child will demonstrate his ability to stretch, moving two parts of his body away from each other to form a straight line (extension) or past a straight line (hyperextension), the muscles on both sides of the joint operating in opposition, one relaxing while the other contracts.**

2. COMMON DEVIATIONS
   a. The inability to balance on toes or reach out beyond the normal resting length of the body or an extremity.
   b. The inability to bend the body or certain parts preparatory to extension.
   c. Holding the stretched position longer than necessary.
   d. Stretching which is not executed smoothly, evenly or in a controlled manner.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS The ability to stretch or extend at will aids in maintaining flexibility of the body joints. This, along with balance, is necessary for agility which is lacking in so many transitional children. Provide opportunities to **stretch:**

      —after preparatory loosening up activities, such as calisthenics or mimetics.
      —entire body and limbs while lying down to eliminate need for balancing.
      —entire body and limbs while sitting or standing, necessitating the element of balance.
      —combining the stretch with a return to natural position or a bending movement.
      —while hanging by the hands from a horizontal bar with feet off the floor.

   b. PRIMARY EDUCABLE STUDENTS Include all activities used to emphasize stretching with the transitional student and introduce the element of imagination and creativeness in **stretching:**

      —like a rubber band.
      —reaching for real or imaginary spots on the floor or wall.
      —to touch an object high off the floor as in the jump and reach test.
      —to obtain maximum height and distance in a jump or leap.

   c. INTERMEDIATE EDUCABLE STUDENTS Stretching may be stressed as essential to good form in performing the various movements essential to sport, apparatus, rhythmic and aquatic activities. Stretching is essential to good follow through, such as in throwing, kicking and striking.

   d. JUNIOR HIGH EDUCABLE STUDENTS Although some students will be able to stretch further or easier than others, all should be able to stretch to some extent. Maintain and attempt to increase stretching ability as required in everyday tasks and for participation in the various physical education activities.

TWISTING Twisting is a rotation or turning of some body part around its own long axis in relation to another part on approximately the same axis. The twist is usually part of a larger movement pattern such as locomotion or manipulation of an object. The head must be twisted to see objects at various angles. The body must twist to get into and out of cars and through small openings. Many everyday tasks require twisting, as in opening jars, twisting dials or screwdrivers. Many stunt, tumbling, apparatus, rhythmic and sport activities require twisting movements.

1. BEHAVIORAL OBJECTIVE **Utilizing body parts which have a long axis of rotation as an inherent part of their structure, such as the spine, arms or legs, the child will demonstrate the ability to twist or turn the part or parts around the axis as required by the movement necessary to perform a movement task.**

2. COMMON DEVIATIONS
   a. Inability to keep one part still and rotate the other in relation to it.
   b. Undesired or uncontrolled twists.
   c. Twisting unnecessarily while performing a locomotor movement, such as jumping.
   d. Inability to twist at different speeds or in different directions.
   e. Indirect or jerky twists.
   f. Combining a bend with a twist unnecessarily.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Perhaps the most common deviation seen in the twisting movements of the transitional child is his inability to twist a part of his body while holding the adjacent part still. This is often seen when they must twist the head to watch an object moving sideward in front of them. They usually turn the entire body to follow the path of the moving object. Much time must be spent in identifying individual body parts and their relation to adjacent parts while performing twisting movements.

Include opportunities to **twist:**

—one arm; both arms; while lying; while standing.
—the legs as far as possible while lying; while standing.
—while standing, the trunk, keeping the lower part of the body still.
—the head around from extreme left to extreme right.

b. PRIMARY EDUCABLE STUDENTS Review the activities used with the transitional students and include **twisting:**

—in relation to the performance of locomotor and non-locomotor movements, as the twisting of the hips in walking or running.
—body parts other than the trunk, head or limbs, such as the extremities — wrists and ankles.
—portions of the spine separately, such as twisting the shoulders while holding the head and the rest of the body still.
—as part of self-testing, tumbling and apparatus skills.

c. INTERMEDIATE AND JUNIOR HIGH STUDENTS Twisting as a necessary part of the mechanics of good form in performing movement patterns essential to the various sport, rhythmic and aquatic skills should be emphasized.

ROTATING Rotating or turning is a circular movement of the body or its parts around in space. For example a spinning top is rotating, as is a log rolling down a hill. Rotating and twisting are similar with the difference being that twisting involves rotating one part in relation to another, while rotating involves the entire part as a whole.

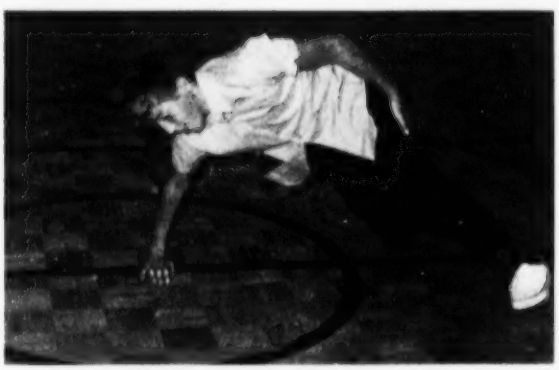
1. BEHAVIORAL OBJECTIVE **Faced with the problem of rotating his body or one or more of its parts and given demonstration in correct rotation, the child will exhibit the ability to rotate the body or its parts, around their length axis in one direction and to return that part or parts to their original position by an opposite rotation, maintaining balance on the base of support throughout.**

2. COMMON DEVIATIONS
   a. Inability to rotate entire body on a pivot base.
   b. Inability to rotate body parts on both sides of the body or equally in body directions.
   c. Failure to rotate without a visual check.
   d. Loss of balance while spinning or loss of control of the part being rotated.
   e. Aimless rotation when not necessitated by the activity.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS The transitional student should encounter little difficulty in rotating the body, especially when rolling on the floor. His biggest problem in rotating or pivoting on one foot will be exhibited by a walking or stepping around of both feet while rotating. The rotation of body parts may be difficult for him to perform without visual checks. Provide opportunities to **rotate:**

   —the entire body around in a lying position, such as imitating a rolling log.
   —the entire body around, standing on one leg.
   —the entire body around, using various points of support such as the seat, stomach.
   —body parts, such as the head, both clockwise and counter-clockwise; arms; legs.

   b. PRIMARY EDUCABLE STUDENTS Make certain that the difference between rotating and twisting is understood. Include all activities used for transitional students. Introduce activities involving **rotation:**



   —around a base of support other than those previously mentioned, such as the Coffee Grinder stunt which involves using one hand as the pivot point, while the legs walk the body around it.
   —in combination with locomotor patterns, such as rotating or turning while skipping, running, etc.
   —while the body is suspended momentarily in mid-air, such a jump and quarter-turn, half-turn and full turn.

   c. INTERMEDIATE EDUCABLE STUDENTS Review activities used with primary students. Emphasize maintenance of balance while rotating. Provide opportunities to **rotate:**

   —around a pivot point located outside the body, such as the joined hands of two partners with the partners turning or rotating around that point.
   —while suspended from a climbing rope, grasping the rope with both hands.
   —various body parts and the whole body itself

as required to solve the movement problems encountered in stunts, tumbling and self-testing activities.
—while performing various creative rhythmic activities.

d. JUNIOR HIGH EDUCABLE STUDENTS Rotation may be included in some of the more complex stunts, tumbling and apparatus activities. Advanced rhythmics will involve rotating with a partner while performing a dance step.

SWINGING Swinging is a pendulum-like motion which is free and easy. It may be fast or slow, strong or weak. One end of the moving part is stationary and the rest of the part swings in an arc, back and forth. The swinging part is normally straight with additional force exerted to downward movement to continue the swing.

1. BEHAVIORAL OBJECTIVE **Understanding the concept of a pendulum-like movement from a base of support, confronted with an activity which necessitates a swinging movement and having sufficient strength to hang on, the child will demonstrate the ability to swing the body or its parts in a rhythmic and continuous movement.**

2. COMMON DEVIATIONS

a. Failure to go back and forth in a pendulum-like movement.
b. Loss of balance and control because of the swing.
c. Inability to swing either or both arms or legs easily.
d. Failure to maintain balance and intended direction of the swing.
e. Lack of backswing when swinging forward.
f. Inability to swing entire body, suspended by hands or by knees.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Initially, these students must be oriented to the concept of swinging. This may be accomplished by demonstrating the pendulum-like movement of a pocket watch suspended by a chain. Proceed next to a playground swing, pushing it into a swinging movement. The student may then sit in the swing and with a push, actually experience the swinging movement. Then, introduce activities which involve **swinging:**

—one arm forward and backward; both arms together; both arms in opposition.
—one leg forward and backward, standing on the other leg.
—one leg or both forward and back while sitting on a table, bending the leg or legs at the knee. Swing together or in opposition.
—arms and legs together while lying as in Angels in the Snow.
—arms and legs together while standing with a slight jump, as in Jumping Jacks.
—while suspended from a bar with the hands, if sufficient strength has been developed to prevent falling.

b. PRIMARY EDUCABLE STUDENTS The swinging concept must be developed as with transitional students. Include all activities mentioned previously and introduce activities involving **swinging:**

—the lower half of the body; the entire body while hanging from a rope or bar by both hands.
—the body in an inverted position while hanging by the knees from a bar.
—while hanging from a bar or rope with one hand.
—to gain upward momentum as in jumping for height.
—to gain forward momentum as in jumping for distance, whether jumping from a stand or from a run.

c. INTERMEDIATE EDUCABLE STUDENTS Continue to develop ability to swing the body or its parts, increasing the complexity of the activities which involve **swinging:**

—forward and backward with a jump down to a proper landing on the backward swing.
—to gain momentum or to maintain balance while performing related locomotor movements, such as running, leaping, jumping, skipping.
—the arms or legs in a direction other than forward and backward, such as rotating the body around on one foot or vaulting over a Swedish box or vaulting horse.
—leg or arm to strike an object to give it impetus, such as kicking a ball or serving a volleyball.
—an external object, such as a baseball bat, paddle or racket to strike another object.

d. JUNIOR HIGH EDUCABLE STUDENTS Make certain all previous skills of swinging have been achieved to some degree. Increase the complexity of the activity and refine the swinging movement.

III. Object Manipulation — Propulsion Patterns

Propulsion patterns are movement patterns which give momentum to a stationary or moving object, moving it or changing its direction of movement.

Children develop most primary propulsion patterns some time before absorption patterns. This is evident in the small child who fends off objects, rather than receiving or catching them.

The early school years are an important period in the child's development of adequate propulsion patterns. The basic propulsion patterns should be taught at this level. In the intermediate and upper grades, the patterns will be refined and integrated into more complex patterns found in games and sports activities.

ROLLING Rolling is an action which gives momentum to a round object, sending it along a flat or inclined surface. Rolling of an object is a preparatory pattern which precedes throwing. The rolling of objects may be seen in games of low organization, requiring the use of the hand or hands. In its most refined form, it is used in bowling. An implement may be used to give impetus to the object, such as seen in the putt in golf or in field hockey.

1. BEHAVIORAL OBJECTIVE **Given the task of rolling a round object and after instruction and practice, the child will demonstrate the pattern of rolling by either grasping the object in one or both hands, or placing the hand or hands behind the object, bending the knees and body in order to keep the object in contact with the rolling surface. Momentum is given to the object by swinging the arm or arms backward, then forward in the direction of the roll and releasing the object, sending it along the surface.**

2. COMMON DEVIATIONS
   a. Failure to keep the object in contact with the surface or to release the object at the point of contact with the rolling surface, resulting in a bouncing action of the object rather than a smooth roll.
   b. Failure to swing the arm backward far enough to give sufficient momentum to the object when the arm is swung forward.
   c. Losing balance at or following the point of release of the object.
   d. Failure to roll the object in the direction intended or to give it sufficient speed in order to roll a distance.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

   a. TRANSITIONAL STUDENTS These students will usually exhibit an inability or failure to bend the

knees, bending only at the waist. Often times they will not grasp the object, but will push or strike the object with the hand or hands. It is also difficult for them to roll objects with one hand, starting the roll to the side of the body. They tend to start rolling actions between the feet. Provide activities which involve **rolling:**

—large round objects, such as a cage ball, by pushing with both hands.
—balls, while seated spread-eagle on the floor, to a partner, using both hands.
—small round objects, which must be grasped in one or both hands.
—objects other than balls, such as hoops, bicycle tires, etc.

b. PRIMARY EDUCABLE STUDENTS Develop the rolling pattern in these students using activities similar to those used with the transitional students. Provide opportunities to **roll:**

—objects in certain directions, such as to a partner, at a bowling pin from a short distance away, or at targets like a cardboard box placed on its side.
—objects as part of a low organization game, such as Circle Dodgeball, where the rolling ball is aimed at another child who must dodge it to avoid being struck.
—objects, such as hoops, tires and large balls while running along side or behind the object.

c. INTERMEDIATE EDUCABLE STUDENTS Continue the previous activities and refine the pattern of rolling by providing opportunities to **roll:**

—objects for accuracy at one bowling pin, at two, at ten as in regular bowling.
—objects as part of bombardment games where a person must be hit by a ball or pins must be hit.
—objects by using an implement as in gym hockey.

d. JUNIOR HIGH EDUCABLE STUDENTS By the time students have reached this age level, the rolling pattern should be complete. Where necessitated by a deviant rolling action, return to activities used at previous levels. Refine the rolling pattern and relate it to more complex activities, such as bowling at a bowling lane or putting at a miniature golf range.

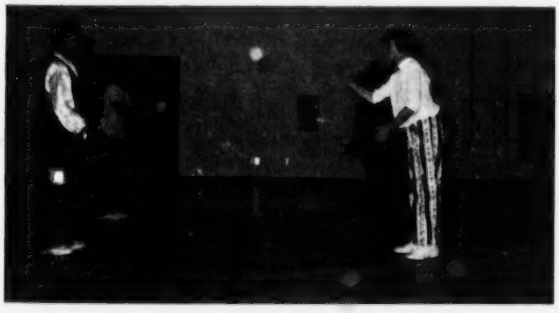
THROWING — UNDERHAND Throwing is a movement pattern in which an object is propelled by one or both hands. It employs a similar swinging movement of the arms as used in rolling. A child's initial attempt to throw is usually that of a two hand toss or underhand throw. As the child matures and his hands get larger and stronger and when small objects are used, a one hand throw develops.

The underhand throw pattern is used for throwing tasks involving accuracy, since the throwing hand follows a straight path. An underhand throw is used in pitching a puck in hopscotch or a ball in softball, as part of the delivery in bowling. The underhand pattern is basic to many other skills, such as the serve in volleyball or badminton where the hand or an implement strikes objects.

1. BEHAVIORAL OBJECTIVE **Given instruction and demonstration and following sufficient practice, the student will exhibit the ability to throw an object underhand, feet together facing the target, bringing the throwing arm straight down and back, rotating the body slightly toward the throwing arm and shifting the weight to the foot on the throwing side. Swinging the arm forward quickly and taking a step forward onto the opposing leg, at the same time shifting the weight to the forward leg, the object is released by the throwing hand when it is approximately at a right angle to the target. The inactive arm swings backward to aid in balance.**

2. COMMON DEVIATIONS

a. Failure to rotate the trunk toward the throwing hand.
b. Too short a backswing of the throwing arm.
c. Failure to shift the body weight backward, then forward onto the lead foot.
d. Releasing the ball too low or too high, missing the intended target.
e. Failure to reach toward the target with the throwing hand in a follow through.



3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS The transitional student will most likely develop the underhand throw to a greater degree of skill than the overhand throw. The teacher's concern should be in observing and evaluating the body actions used in propelling the object, rather than being con-

cerned with what happens to the object after it is released. Once the underhand throwing pattern has developed to some degree of skill, then the teacher can be concerned with accuracy of the throw. Provide activities for **underhand throwing:**

—of balloons, observing and evaluating underhand throwing pattern.
—of fleece balls or beanbags, with little concern for accuracy.
—of large balls, using both hands.
—of small balls, using one hand.

b. PRIMARY EDUCABLE STUDENTS Follow a similar procedure used with transitional students. Be aware of the underhand throwing pattern mechanics and begin concern for accuracy. Provide opportunities to **throw objects underhand:**

—to a wall, gradually increasing the distance.
—at targets drawn on a wall, increasing the distance or decreasing the target size as accuracy improves.
—to a partner who catches it and throws it back underhand.
—in a rolling motion such as used in Circle Dodgeball or Kickball.
—at stationary and moving targets.

c. INTERMEDIATE EDUCABLE STUDENTS Evaluate their underhand throwing patterns, returning to basic activities mentioned above. Refine the mechanics of the throw and increase the complexity of the activities and the degree of accuracy required to perform the activities. Allow for **underhand throwing:**

—during or following a combination of locomotor movements, such as running, stopping, pivoting and then throwing.
—using smaller objects and smaller targets, such as tossing a beanbag through a small hole in a target or tossing a softball into a basket or a table tennis ball into a cup.
—as part of lead-up activities to seasonal sports, such as pitching a softball, lateralling a football or passing basketball.

d. JUNIOR HIGH EDUCABLE STUDENTS The underhand throwing pattern may be further refined where necessary. Accuracy of the throw will play an important role in how well the junior high student performs in seasonal sports requiring such a throw.

THROWING — OVERHAND Overhand throwing is similar to underhand throwing in that the body actions parallel those used in throwing underhand, to some degree. The major difference is in the movement of the arm in an overhead motion rather than underhand.

The overhand throw is used to propel objects which are small enough to be grasped by the fingers. It is commonly used for most throwing in softball, baseball and football. It serves as the basis for the overhand serves in volleyball and tennis and other movements in net games, such as the smash in tennis or badminton or the spike in volleyball.

1. BEHAVIORAL OBJECTIVE **Engaged in an activity requiring the throwing of an object overhand and after instruction, demonstration and practice, the student will exhibit the ability to throw overhand, gripping the object by the fingers of the throwing hand, standing in a stride position with the opposing foot forward, bringing the throwing arm back with the elbow bent, holding the object about ear high, with the wrist cocked. The trunk is rotated back toward the throwing arm, the weight on the rear foot with the opposing arm up and pointed toward the target. The object is brought forward with the elbow of the throwing arm leading, the wrist and hand snap forward and the object is released, shoulder high, giving final impetus to it with the fingers. At the same time the trunk rotates toward the target, with a shifting of the weight forward to the lead foot. The hand and arm follow through pointing at the target. The rear foot is brought forward in a step to regain balance and to get the body into position for the next move.**

2. COMMON DEVIATIONS
   a. Forward movement of the foot on the side of the throwing arm, rather than the opposing foot.
   b. Failure to rotate the trunk backward toward the throwing arm and forward toward the target.
   c. Gripping the ball with the palm of the throwing hand.
   d. Failure to bend the throwing arm and leading the throw with the elbow.
   e. Holding the elbow too close to the body, resulting in a pushing or shoving motion.
   f. Failure to transfer the weight onto the lead foot.
   g. Using little or no follow through.
   h. Inability to throw with non-preferred arm.
   i. Faulty timing of body movement with arm movement.
   j. Release of the object too soon or too late, resulting in inaccuracy of the throw.
   k. Loss of balance during throwing pattern.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS While capable of developing the overhand throwing pattern to some extent, the transitional student, especially the Mongoloid, will not usually attain a high refinement of this pattern. A major problem encountered in teaching the transitional student to throw overhand is his inability or failure to establish a dominant throwing hand. This may be observed quite frequently when they throw one

time with the right hand and possibly the next time with the left hand. They appear to have difficulty in mastering the concept of bending the elbow of the throwing hand and cocking that arm before throwing. Often, they will throw the object by pushing it forward or by lowering the arm, bringing it backward behind their body and then swinging it forward in a stiff arm movement much like throwing a hand grenade. Provide opportunities for the transitional student to **throw:**

—at targets on a wall or into barrels or baskets, increasing the distance as accuracy improves.
—in dodgeball games, such as Circle Dodgeball or Spud, where they must hit a dodging or stationary person, while remaining stationary themselves.
—while running, at a moving person as in Posse Tag or Ball Tag.
—as part of developmental activities leading up to participation in seasonal sports which require an overhand throw.
—for distance by applying more force to the object and increasing the trajectory of the throw.

b. PRIMARY EDUCABLE STUDENTS Primary students will exhibit many of the deviations in the overhand throwing pattern found in the transitional group. Throwing with the dominant hand should be encouraged, as well as throwing with either hand. Provide opportunities to **throw objects overhand:**

—at targets; to a partner.
—as part of games of low organization, such as Ball Tag, Dodgeball or Spud.
—while running; after stopping and pivoting; or as required by lead-up activities to seasonal sports.
—using the various type balls, such as Whiffle balls, junior-size footballs, softballs and baseballs.

c. INTERMEDIATE EDUCABLE STUDENTS Continue to emphasize accuracy and distance in their throwing pattern. Speed of movement of the thrown object may be increased, if the accompanying skill of catching is present. Continue to observe their overhand throwing patterns for faults and correct where present.

d. JUNIOR HIGH EDUCABLE STUDENTS Overhand throwing patterns of these students should be developed to a fine degree of execution. Correct faults where present. Continue providing activities which lead-up to participation in seasonal sports.

HITTING Hitting is giving impetus to an object by swinging or striking it with some part of the body, usually the hand or hands; or with an implement which is controlled by the hand. Hitting is a striking pattern, as are kicking and blocking. The hitting pattern of movement occurs each time an object is swung at, regardless of whether or not the object is contacted. Swinging a bat at a pitched softball and missing it is a good example.

The hitting pattern is similar to the throwing pattern, except for the fact that the object to be propelled is not in the hand and the arms swing without an object in them. Holding an implement in the hand or hands necessitates a slight modification of the pattern.

1. BEHAVIORAL OBJECTIVE **Given the problem of hitting a stationary or moving object with the hand, hands or with an implement and having some degree of proficiency in the patterns of throwing, the student will demonstrate the pattern of hitting, keeping his eyes on the object, swinging the arms, rotating the body and shifting the weight as in throwing and following through. The hitting pattern will be demonstrated identically each time it is attempted regardless of whether or not the object swung at is contacted.**

2. COMMON DEVIATIONS

a. Failure to use proper backswing.
b. Failure to rotate the body back toward the backswing and forward toward the object to be struck.
c. Failure to grip the hitting implement tightly or releasing the implement when the object is contacted or missed.
d. Jerky irratic movements instead of a smooth rhythmic swing.
e. Improper timing of body movements with arm movements.

Note: It is not a deviation if the object to be hit is missed!

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Often transitional students experience difficulty in hitting objects due to a visual-perceptual problem. Attempting to hit a moving object such as a shuttlecock with a racket or a pitched ball with a bat will often be very difficult, if not impossible for many of the transitional students. Experience in teaching these students has shown that the object to be hit should be stationary or slow-moving. Provide opportunities for the transitional students to **hit:**

—soft objects which are stationary on the floor with their hands, fists.
—balloons with the hands and fists and even with implements, such as a wood paddle or plastic bat.
—slightly deflated playground balls or volleyballs against a wall or up in the air.
—plastic Whiffle balls off of a batting tee with a plastic bat.
—rolling or bouncing balls with their hands or fists.

b. PRIMARY EDUCABLE STUDENTS Emphasis should be on correct form to be exhibited in the hitting pattern. All activities listed for transitional students should be provided, plus opportunities to **hit:**

—a slightly deflated ball with the hand after tossing it up into the air.
—a ball after dropping it to bounce on the floor.
—a ball held in one hand, using an underhand, side arm or overhand hitting motion with the fist.
—a ball thrown or bounced by another student with the fist.
—a slowly moving object, with an implement such as hitting a shuttlecock or balloon with a wood paddle or a puck with a hockey stick.
—an object suspended by a rope, such as a tether ball.

c. INTERMEDIATE EDUCABLE STUDENTS Continue to stress good form in hitting. Increase the complexity of the hitting task. Revert to activities for younger levels, when necessary. Provide activities which require **hitting:**

—an object with accuracy, such as serving a volleyball over a net or hitting a ball so that it strikes a wall target.
—an object for distance, as in batting a softball.
—a fast moving object like a served tennis ball or pitched softball.
—a ball and keeping it within boundary lines, such as in playing Four Square.

d. JUNIOR HIGH EDUCABLE STUDENTS Observe for any major deviations in the hitting pattern and correct. More emphasis may be placed on making contact with the object swung at. Increase difficulty of the hitting task. Stress recreational activities, such as table tennis, badminton, croquet.

KICKING Kicking is a striking pattern in which the leg or foot is used to strike a stationary or moving object for the purpose of propelling it or deflecting it, changing its path of movement. The kicking pattern does not require that the object to be kicked be contacted. It is still a kicking pattern if the object is missed.

Kicking plays a major role in the games of soccer and speedball. It is used in football in two forms — a place kick and a punt — the difference being a place kick is kicking a football from a stationary position and a punt is kicking a football which has been dropped from the hands. Low organization games, such as Kick the Can or Hopscotch involve kicking. Aquatics employ a kicking pattern against an object — water, which propels the kicker, not the object kicked.

1. BEHAVIORAL OBJECTIVE **Given the task of propelling a stationary or moving object by striking it with the leg or foot and after instruction and practice, the student will demonstrate his ability to kick, a swinging movement of the leg from the hip, preceded by a backswing of the leg, then a forward swing, contacting the object with the toe and moving through it in a continuous upward forward movement. The body is balanced on the foot in contact with the ground and the opposing arm is out front to maintain balance.**

2. COMMON DEVIATIONS

a. Failure or limitation of a backswing.
b. Inability to kick with either foot.
c. Failure to execute a true swinging movement of the leg, characterized by a short kicking motion or a jabbing movement at the object.
d. Loss of balance when kicking.
e. Failure to use opposition of leg and arm.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS It has been observed in Mongoloid children that many of them exhibit identical faulty kicking patterns, characterized by stopping a rolling ball with their hands, swinging the leg forward with little or no backswing and following through after kicking the ball with an extremely high upward motion of the kicking leg with both arms behind the body and down to the sides. Other children in the category of Transitional seem to learn kicking with few problems. Provide activities where the transitional student can **kick:**

—a balloon or beanbag with either foot along the floor, walking after it to kick it again.
—stationary balls of various sizes along the floor.
—slow-moving rolling balls of various sizes.
—a cage ball as part of a modified Circle Dodgeball game where the class joins hands in a circle with one student inside who attempts to dodge the kicked cage ball.

b. PRIMARY EDUCABLE STUDENTS Follow a similar progression of kicking activities as used with the transitional student. The punt may be introduced at this level, however, it will be difficult for them to master as seen by their tendency to throw the ball into the air rather than dropping it and the striking of the ball with other parts of the leg, not the foot. Allow them to **kick:**

—stationary balls in different directions; moving balls.
—stationary balls for accuracy, as to a partner.
—balls used in seasonal sports, such as footballs from a kicking tee.
—balls with short, controlled kicks, as in dribbling a soccer ball with their feet.

c. INTERMEDIATE EDUCABLE STUDENTS At this age level, the educable students should be able to do most of the skills listed previously with some degree of proficiency. Introduce activities which require **kicking:**

—balls for accuracy, such as through a soccer goal.
—in the form of a place kick, the ball stationary on the ground or elevated on a tee, either from a standing position or with a short walking or running approach.
—in the form of a punt, where the ball is dropped and kicked with the foot, as seen in punting a football or the punt used by a soccer goalie.
—a rolling or bouncing ball as part of a lead-up game, such as kickball.

d. JUNIOR HIGH EDUCABLE STUDENTS Continue providing games and seasonal sports which provide practice of the kicking pattern. Observe and correct any deviations seen.

BLOCKING Blocking is the striking pattern of giving momentum to a moving object by positioning the body or parts of the body in its path. Blocking is also the deflecting of an object in its moving path to give it a new direction. An object may be blocked by the body alone, such as blocking an opponent in football or blocking a soccerball with the body or head or blocking can be done with a held implement, such as bunting a softball.

1. BEHAVIORAL OBJECTIVE **Given the problem of giving impetus to a moving object or changing the direction of its path of movement by using the body or parts of the body or an implement held in the hands and after instruction, demonstration and practtice, the student shall exhibit the ability to block, holding the body, body part or implement stiff or still enough to withstand the force of the oncoming object and making it rebound in a new direction. The object to be blocked must be watched with the eyes and if the block is intended to move an object, a pushing movement of the body, body part or implement must be made.**

2. COMMON DEVIATIONS

a. Failure to stiffen or still the body, body part or implement at impact.
b. Failure to brace the body to offset the force or weight of the object to be blocked.
c. Failure to position the body, body part or implement in the path of an oncoming object.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Since blocking involves contacting an oncoming object, it may be extremely difficult to teach to the transitional students. To teach them to block another person, while at the same time attempting to teach them to move around **without** bumping into or contacting other persons or objects, seems to be contradictory. They can be taught to block small oncoming objects with their body or body parts, as long as the object to be blocked is of reasonable size and weight and presents little danger of harm to them. Provide opportunities to **block:**

—large, light oncoming objects with their body or body parts, such as a cage ball.
—small oncoming objects with the body or body parts, such as a rolling playground ball.
—small oncoming objects with an implement such as a plastic puck with a plastic hockey stick.

b. PRIMARY EDUCABLE STUDENTS Emphasis must be placed on blocking objects without resultant harm to the blocker's body or body part. Include all activities listed for Transitional students and introduce activities which provide **blocking:**

—of an oncoming person with hands joined in a line formation, as in Pom Pom Pull Away or in a circle formation such as Bull in the Ring.
—of fast moving, rolling balls with the body parts, such as found in Circle Stride Ball, where students form a circle, standing in a stride position and attempt to block a ball rolled by a person in the center of the circle to prevent it from passing out of the circle between their legs.
—of objects as part of lead-up skills to seasonal sports, using body parts, such as the head or shoulders to block an attempted goal in soccer.

c. INTERMEDIATE EDUCABLE STUDENTS More emphasis may be placed on the blocking patterns found in contact sports and the use of implements. Be certain that most previously mentioned activities have been mastered and introduce activities which provide an opportunity to **block:**

—as part of seasonal sport which requires contact with an opponent, such as the screen in basketball, the shoulder block in football or body-blocking in soccer and field hockey.
—an oncoming object with an implement held in the hands, such as bunting a pitched ball with a bat or holding a racket or paddle still to let a ball bounce back to the opposite court in a tennis game.

d. JUNIOR HIGH EDUCABLE STUDENTS Continue to emphasize correct blocking patterns in activities which require contacting an oncoming object to change its path of movement. Accuracy of the block may be stressed, such as in heading a soccer ball or blocking an opponent in football in a certain direction to open up a hole for the ball carrier.

PUSHING Pushing is a propulsion pattern involving a forceful movement to give momentum to some object in order to move it away from the body. It may also involve a movement against an object to propel the body away from it. It is a shoving or extending movement as opposed to the swinging movement seen in striking patterns. Pushing may involve continual contact with the object as in pushing a lawn mower or it may involve contact only at the beginning to get an object started on its path, as in pushing a sled to start it downhill.

Pushing is an essential skill in every day tasks, such as mowing lawn, vacuuming the carpet, sawing a board, moving heavy objects. Stunts, tumbling and apparatus activities require a push to initiate movement.

1. BEHAVIORAL OBJECTIVE **Confronted with the problem of moving some object away from the body or with making a movement against an object in order to move the body away from it, the child will exhibit the ability to push, maintaining contact with the object for as long as necessary to propel it, exerting force in a straight line in the direction of the push and using an initial bending followed by a forceful extension of the body part or parts used.**

2. COMMON DEVIATIONS
   a. Attempting to push with the body or the part already extended.
   b. Losing contact with object or not making good initial contact with it while pushing.
   c. Pushing the object in a circular, rather than a straight path.
   d. Failure to involve the whole body when pushing large or heavy objects.
   e. Pushing off center on an object causing it to twist or turn rather than moving ahead.
   f. Pushing with the body twisted or turned improperly.
   g. Failure to exert constant even pressure.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Care must be taken to control the size and weight of an object to be pushed. Emphasis should be placed on constant pressure and contact with the object. The transitional student should also learn the effect of propelling his body by pushing against an immoble object. Provide opportunities to **push:**

   —light objects along the floor.
   —using one hand or both.
   —with the feet.
   —to move the body or part of it away from an object as in executing a push up or pushing oneself along on a scooter.

   b. PRIMARY EDUCABLE STUDENTS Use caution in requiring the pushing of large or heavy objects. Emphasize efficient pushing patterns, using as many body parts as necessary depending upon the amount of force necessary to push the object. Provide opportunities to **push:**

   —as required by combative activities, such as pushing an opponent across a line or off of a mat.
   —against a wall or the floor to propel the body in the desired direction.
   —as required in stunts and tumbling activities to initiate movement.
   —as required in many apparatus activities where a pushing pattern is used to support the body weight on extended arms.

c. INTERMEDIATE EDUCABLE STUDENTS Pushing patterns in combination with locomotor patterns will be present in the various physical education activities in which this group engages. Provide opportunities to **push:**

—objects of varying weights in different directions and for varying distances.
—against objects to initiate movement as found in stunts, tumbling, apparatus, aquatic and seasonal sports activities.
—using the various implements employed in games.

d. JUNIOR HIGH EDUCABLE STUDENTS Observe and correct deviations in the pushing patterns exhibited by this age group. Provide activities which require pushing along with various other movement patterns. Weight and size of objects to be pushed can be increased. However, it is still necessary to caution this age group on not over-exerting their body or body parts when pushing.

PULLING Pulling is a propulsion pattern which is the reverse of pushing. Pulling is the use of an extended part of the body to make contact with the object to be pulled and bending or leaning to bring the object nearer to the body or to make it follow the body.

Pulling is an essential part of our every day life, such as pulling a door open, pulling a window down to close it, pulling on clothes, pulling a drawer out. Swimming requires a pulling pattern of the arms and hands and a pushing or kicking pattern of the legs and feet. Various apparatus activities require a pulling movement to elevate the body.

1. BEHAVIORAL OBJECTIVE **Given the task of moving or drawing an object toward one's body and having had instruction, demonstration and practice, the child will pull the object by extending the arm or arms toward the object contacting and grasping it and moving the object toward the body or making it follow the body by bending the arms, legs or body or by leaning in the direction of desired movement and following a straight path.**

2. COMMON DEVIATIONS

a. Little consistent contact with the object, losing the grip.
b. Uneven, unsafe pulling movement.
c. Failure to keep other body parts from interfering with the intended path of the pulled object.
d. Failure to pull the object directly toward oneself, as seen by an upward jerk of the object.
e. A tendency to lose body balance or to maintain balance when pulling.
f. Locomotor pattern deviations following the pulling movement, such as improper walking patterns while pulling a wagon.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Use caution to insure that these students do not attempt pulling large or heavy objects toward themselves endangering their safety and possibly resulting in bodily harm. Relate pulling to everyday tasks which these children will encounter. Provide opportunities to **pull:**

—an object on wheels, such as a wagon.
—themselves along the floor with the hands while seated on a scooter board.
—lightweight objects toward the body or pull them so that they follow the body.
—while in various positions, lying down, seated, kneeling.
—as part of a team, as in Tug O'War or parachute activities.
—one's body up onto playground apparatus, such as a Jungle Gym and vertical or inclined ladders.

b. PRIMARY EDUCABLE STUDENTS Stress safety in pulling. Expose the primary students to identical pulling movements used with transitional students. Provide a variety of activities which allow them to **pull:**

—objects of varying size and weight toward them or behind them as they walk along.
—objects, varying the speed of movement.
—as required in various combative games, such as pulling an opponent across a line.
—a partner from a lying to a standing position.
—the body up onto apparatus or through the water.

c. INTERMEDIATE EDUCABLE STUDENTS Size and weight of the object to be pulled may be increased as strength increases. Check for deviations in the pulling pattern and correct where present. Allow for opportunities to **pull:**

—as required in combative games, such as King on the Mat.
—as required in seasonal sports lead-up activities, such as pulling an offensive opponent off balance in football.

—as required in individual sports, such as pulling the arrow back in archery and in dual sports, such as pulling an opponent down in wrestling.

d. JUNIOR HIGH EDUCABLE STUDENTS Pulling activities which develop or maintain strength should be provided. Complexity and difficulty of the activity which requires pulling may be increased. Correct any deviations observed. Allow for **pulling:**

—objects up, down, across, in varying directions.
—against immovable objects to maintain and develop strength, such as isometric exercises.
—heavy objects, large objects.
—the body in an upward direction, as in performing pull ups or as required in climbing a rope.

LIFTING Lifting is a propulsion pattern that is an extension of the pulling pattern. It is a movement that involves pulling to get an object or a body part from one level to another, against the pull of gravity. Lifting is pulling with a specific purpose in mind — raising something upward or off its previous position. Pushing is present in a lifting pattern when a very heavy object is lifted. The upper body and arms pull, while the legs push from a bent to extended position.

Lifting is an everyday household task. In stunts, tumbling and apparatus activities, the body is lifted upward by a pulling movement of the arms. Balls and implements employed in sports activities must be lifted into position before the next movement can be started. The arms and legs are lifted in all sports activities and rhythmics.

1. BEHAVIORAL OBJECTIVE **Confronted with the task of raising an object or a body part from one level to another and having an understanding of the patterns of pushing and pulling, the child will lift the object by extending the arms, contacting and grasping the object, followed by a bending movement of the arms as the object is moved upward and extending them as the object reaches a high position or is moved to a lower position. When lifting heavy objects, the legs assist by first bending at the knees, then extending in a pushing movement against the floor.**

2. COMMON DEVIATIONS

a. Losing the grip on the object being lifted.
b. Lifting in jerky movements, rather than a steady, even lifting motion.
c. Failure to incorporate the legs into a lift of heavy objects, placing too much stress on the back.
d. Attempting to lift objects that are too heavy.
e. Loss of balance while lifting.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Present activities related closely with everyday tasks which the transitional child will be confronted with. Keep lifting patterns simple and allow lifting of objects that have reasonable size and weight. Provide opportunities to **lift:**

—parts of the body, while lying on the floor; while sitting; while standing.
—body parts, as required by calisthentics or simple rhythmics.
—small, lightweight objects up to varying levels.
—implements into position for propulsion movements.
—objects as part of a group effort, such as the lifting of a parachute by the class, spaced equally around its rim, all lifting together.

b. PRIMARY EDUCABLE STUDENTS Follow similar procedure of teaching lifting pattern as used with Transitional students. Stress correct lifting patterns. Allow them to **lift:**

—objects of increasingly heavier weight.
—objects of varying sizes and shapes.
—their body up to a position on apparatus.

c. INTERMEDIATE EDUCABLE STUDENTS Safe lifting of objects of reasonable size and weight should be exhibited by this group. Observe and correct lifting pattern deviations when present. Provide activities which involve **lifting:**

—body parts up to positions necessitated by the subsequent movement.
—implements up to positions from which another movement pattern will be initiated.
—objects up and down, of varying weights to increase strength, as in weight training.
—another individual up to a position required for the next action, such as a Fireman's Carry.

d. JUNIOR HIGH EDUCABLE STUDENTS Correct deviant lifting patterns. Return to previous activities when necessary. Provide opportunities to **lift:**

—gradually heavier objects forcefully to build strength in boys.
—body parts or objects gracefully, as in creative dance or ball gymnastics for girls.
—body parts, objects and implements as required for participation in physical education activities.

IV. Object Manipulation — Absorption Patterns

Absorption patterns are for the purpose of receiving or controlling moving objects and stopping their movement. Whenever an object must be handled or stopped in its approach toward the body, whether thrown, kicked or propelled in some other manner, an absorption pattern is employed by the receiver.

Catching is the only true absorption pattern. Catching with the feet, trapping, or with other parts of the body such as the hands, arms or body, are all forms of the absorption pattern of catching. Carrying is included in absorption patterns since it involves, not only lifting, but an absorption of the weight of the object as well. Blocking is related to the absorption patterns since some element of receiving and controlling the force of a moving object is involved. However, the main purpose of blocking is a deflecting or redirecting of the object's movement path. Thus, it was discussed earlier under propulsion patterns.

CATCHING Catching is the receiving of a moving object, which is on a path of movement toward the receiver's body, with the hands, arms and/or body in order to stop its movement and to control it. Although implements may be held in the hand, such as a baseball glove or scoop, it still necessitates the pattern of catching. Fielding a rolling ball is essentially catching.

Catching plays an important role in many children's games and adult recreational activities. It usually is employed in relation to throwing. The object received may be another person's weight, as in stunts, tumbling, or dance activities.

The task of catching involves much more than using the hands and arms. Correct positioning of the body to receive the object propelled at it and maintaining the body balance prior, during and after the catch are essential. The ability to track the moving object with the eyes and coordinate eye-hand and eye-body movements are other essential elements in the catching pattern.

1. BEHAVIORAL OBJECTIVE **Confronted with the task of receiving and retaining a moving object and after instruction and practice of the catching pattern, the student shall demonstrate the pattern of catching by positioning his body in the path of the oncoming object, facing it with his feet apart for stability and balance. Receiving the object in his hands, then in his arms and body if necessary, he bends his arms as the object contacts him in order to absorb its force and retain it. If the object is approaching below his waist, the fingers point down; if above his waist, they point upward.**

2. COMMON DEVIATIONS
   a. Not positioning the body for receipt of the oncoming object, resulting in a missed catch.
   b. Loss of balance prior to, during and after the catch.
   c. Failure to absorb the force of the object by giving with it.
   d. Inability to catch with either hand or both hands.
   e. Failure to contact the oncoming object with the fingers, then the hand, arm and body if necessary.
   f. Closing the hands before the object has been contacted.
   g. Bobbling or juggling the object after catching it.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES
   a. TRANSITIONAL STUDENTS Transitional students often exhibit visual-motor difficulties which

inhibit their ability to become proficient at catching patterns. Objects to be caught must present little or no danger of bodily harm to the Transitional student. He will tend to fend off an approaching object, rather than catch it. Catching with both hands and additional use of the arms and body are seen most often in the catching patterns of these youngsters. Seldom will they achieve the ability to catch an object in one hand. Provide opportunities to **catch:**

—large round balloons, emphasizing a slight squeezing of the balloon as it contacts the hands.
—bean bags and fleece balls, either thrown by oneself or thrown by another person.
—large playground balls rolled by a partner; bounced; thrown.

b. PRIMARY EDUCABLE STUDENTS The primary level educable students are capable of learning catching patterns, just as non-retarded primary children do. Be aware of perceptual-motor difficulties which may cause poor catching patterns. Start these youngsters with similar catching progressions as used with Transitional students and allow for opportunities to **catch:**

—throws or bounces to self, varying the size, shape and weight of balls or objects used.
—objects, with oral cues from the teacher, such as Don't close your eyes, Watch the ball or Squeeze the ball.
—balls or objects rolled, bounced or thrown by another, with varying speed and force of throw.
—an object tossed from one hand to the other.
—large balls or objects with hands, arms and body.

c. INTERMEDIATE EDUCABLE STUDENTS Catching patterns developed at earlier levels may now be applied to lead-up activities to sport skills. Allow to **catch:**

—objects while running, walking or moving about.
—balls, fielding grounders, bouncing balls or flyballs, such as used in softball.
—balls, immediately followed by other locomotor patterns, such as catching and shooting a basketball.
—objects with increasingly complex movements, such as throwing a ball up, clapping once and catching; clapping twice, etc.

d. JUNIOR HIGH EDUCABLE STUDENTS Catching at this level will be performed as part of a game. Teach catching of all types of balls — softballs, basketballs, baseballs, footballs, etc.

TRAPPING Trapping is simply catching using the feet, shins, legs or knees. It is useful and necessary in such games as soccer and speedball, but not essential to the play of most children.

The moving object is stopped, controlled and retained, using the lower extremities, rather than the hands, arms or upper body.

1. BEHAVIORAL OBJECTIVE **Given a game situation which requires that the moving object be stopped, controlled and retained by the lower extremities and having had instruction, demonstration and practice in stopping an object in that manner, the child will exhibit the ability to trap the moving object in one of two positions: standing with the body weight balanced on one foot as the object is trapped by the other or on both feet, trapping the object between them; and sitting, trapping the object between the feet or catching it under one of them.**

2. COMMON DEVIATIONS

a. Failure to contact the object with one or both feet or under or between the legs or feet.
b. Loss of balance while trapping in the standing position.
c. Postural defects when trapping in a sitting position.
d. Necessity to use hands in conjunction with the feet or legs.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Trapping, as part of a game like soccer or speedball, will not be an essential pattern for the transitional student to learn. Some time may be spent on trapping rolling balls, while sitting or while standing as an effective means of stopping a rolling ball prior to kicking it, as found in the game of Kickball.

b. PRIMARY EDUCABLE STUDENTS Trapping should be taught at this level, since it is so necessary to successful participation in seasonal sports of soccer and speedball. Provide opportunities to **trap:**

—balls, beginning with a stationary ball to teach balance and proper contact with the balls in both sitting and standing positions.
—slow-moving balls of various sizes from a sitting position; from a standing position.

c. INTERMEDIATE EDUCABLE STUDENTS Complexity of trapping pattern may be increased to allow practice in **trapping:**

—rolling and even low-bouncing balls with the legs, while sitting; with the foot or feet or knees while standing.
—a rolling ball, followed by a kick.

d. JUNIOR HIGH EDUCABLE STUDENTS Review and correct deviations from trapping patterns learned at earlier levels. Teach **trapping:**

—of a rolling ball, while running, requiring a stop-trap-kick movement.
—as part of participation in soccer or speedball.
—in a more complex form, such as with one knee, both knees.
—as a preparatory pattern to picking or tossing the ball up to the hands with the feet, as required in speedball.

CARRYING Carrying is an absorption pattern which requires that the individual adjust his body to the size and weight of the object to be carried, while engaged in a locomotor pattern, such as walking or running.

Carrying is an essential pattern in a child's development. He not only learns to carry his own body weight while moving, but also must learn to carry external objects while playing or working. Everyday tasks include: carrying toys, books, small pieces of furniture, equipment, boxes. Carrying usually follows a lifting pattern to move an object to a new place.

1. BEHAVIORAL OBJECTIVE **Faced with the task of lifting a reasonably small and light object for the purpose of transporting it to a different place and having an understanding of the principles of correct and safe lifting, the child will demonstrate his ability to carry an object, lifting it with one hand or both and controlling and retaining it in a balanced position in one or both hands, in his arms, on his back or on his head; and transporting it, using some form of locomotor pattern, to a different place.**

2. COMMON DEVIATIONS

a. Loss of balance while moving with the object.
b. Loss of grip or control of the external object, resulting in its falling or dropping.
c. Failure to adjust the body to the size and weight of the object, resulting in muscular strain.
d. Failure to initiate another locomotor movement after the object has been lifted and controlled.

3. SUGGESTED DEVELOPMENTAL ACTIVITIES

a. TRANSITIONAL STUDENTS Carrying patterns taught to these youngsters should involve external objects to which they will be exposed. Provide opportunities to **carry:**

—objects of reasonable size and weight, accompanied by various locomotor movement patterns.
—objects encountered in everyday activities, such as small chairs, dishes, books, small tools.
—objects or small apparatus used in play, such as toys, balls, bats.

b. PRIMARY EDUCABLE STUDENTS Emphasize the safe carrying of external objects of reasonable size and weight. Provide for **carrying:**

—of different shaped objects, involving the use of one hand; both hands.
—objects, with a partner, such as carrying a large box, a basket full of beanbags.

c. INTERMEDIATE EDUCABLE STUDENTS Continue to provide opportunities to develop safe carrying habits. Introduce opportunities to **carry:**

—objects while negotiating an obstacle course, up and down stairs, walking a balance beam.
—objects, with a partner, one walking forward, the other walking backward, as in carrying a table or trunk.

d. JUNIOR HIGH EDUCABLE STUDENTS Carrying objects while participating in the various seasonal sports and while performing a variety of locomotor movements should be offered, emphasizing safety.

Part III

Physical Education and Recreation Activities

Assuming that the mentally retarded student has accomplished, acquired or mastered some or all of the developmental patterns or skills discussed in Part II, these patterns or skills may be put to practical use in games, sports and recreational activities found in the physical education and recreation program. They are presented in Part III, with a brief narrative, types where applicable, teaching suggestions and activities for the various levels of students. Specific names of games, rhythmic activities or sports are often mentioned without detailed directions or instructions. The reader is referred to the bibliography for the titles of books on physical education and recreation where more information may be obtained.

Rhythmic Activities

Rhythm may be defined as ordered movement that runs through all beauty. Rhythm is present in our heart beat, our breathing and our daily life pattern of work, eat, sleep. Nature's seasonal cycle and day and night are rhythmic. Intricate lace patterns and woven materials have rhythm. Architectural design is a harmonious balance of structural members, doors and windows.

All locomotor movement involves rhythm. All children have a sense of rhythm, to some degree. They have a need for self-expression and a latent creative ability, which can be enhanced through rhythmic activities.

Retarded children, especially, have a need to learn about their body, its parts and what they can do. They need to know how to adapt the various movements of their body and its parts to such factors as force, space and time. It was thought, at one time, that retarded children should not engage in rhythmic activities. Supposedly, the auditory center of the brain was located on the same side as the centers which affect intellectual learning and, since the mentally retarded were poor learners, music should be omitted from the program to prevent it from inhibiting intellectual growth.

This theory has been disproven as seen by the fact that the Riverview School in Manitowoc and the Walworth County Special School in Elkhorn have included rhythmic activities and music in their programs with no apparent effect on intellectual learning. The Walworth County School, in particular, has been successful in including not only vocal music, singing games and dance but instrumental music as well. Some of its educable mentally retarded students have become proficient on such instruments as the coronet, trombone, drums, guitar, bass violin and accordian.

It is the premise of this publication that all children, including the retarded, need activities to develop their inherent sense of rhythm. Their retardation in cognitive or intellectual functioning does not appear to affect their ability to learn and participate in music and rhythmic activities. When one considers the many values found in a good program of rhythmics, it appears desirable that the retarded child receives an opportunity to benefit from them. One of the greatest values found in rhythmic activities is the social interaction. Gone is the competitive atmosphere so often encountered by the retardate in classroom and in many other physical education activities. Success, pleasure and satisfaction awaits the retarded child in rhythmics. Here, he can put to practical use the various locomotor and non-locomotor patterns which he has developed, with an additional stimulus — music.

Our discussion of rhythmic activities for the mentally retarded is not intended to be a step by step recipe or cookbook for teaching rhythmics to the retarded. Rather, the various kinds of rhythmic activities are discussed, with appropriate activities for the various age levels. Many specific activities are listed, some with the name of the accompanying record. The reader is urged to find the mentioned activity, game or dance in a book on rhythmics or in a physical education book. Many of the books in the annotated bibliography contain detailed descriptions of rhythmic activities.

Accompaniment

Accompaniment is any series of sounds with intervals of silence separating the series. Rhythmic accompaniment should be of good quality so that the child will be stimulated to movement.

TOM-TOM OR DANCE DRUM Tom-toms may be purchased commercially or constructed from a tin can and a piece of inner tube. A resonant drum beat has a stimulating effect on children. Most locomotor, non-locomotor and object-manipulatiaon patterns can be done to a drum beat.

PHONOGRAPH Almost any record can be of value in a program of rhythmic activities. Records are available from commercial companies for fundamental rhythmics, singing games, specific dance steps, marches, folk and square dances and social dances.

The phonograph should be of good quality and handle not only the standard record types (33⅓, 45 and 78 rpm), but have a variable speed control as well. This is especially essential for use with retarded youngsters, especially for those with lower intellectual powers. The variable speed control enables the instructor to play records slightly slower or faster than their intended rpm speed. The phonograph should provide sufficient volume to be heard above the activity's noise and should have a microphone input jack.

TAPE RECORDER The recorder allows music to be recorded in many ways. Vocal instructions or directions for the activity can be recorded on tape. Specialized routines, such as rope jumping or exercising to music, requiring abrupt changes in rhythm can best be accompanied by taped music. Perhaps the only disadvantage of the tape recorder is that the speed or tempo can not be controlled once the music has been taped.

PIANO Even if the physical educator could play the piano, which most cannot, it would prove difficult for him to play and follow the printed music and, at the same time, observe the progress of the children.

SONGS, RHYMES AND POEMS Singing games can be performed using only the children's voices, once the music and words have been learned. Examples of this are The Farmer in the Dell, London Bridge and Bingo. The physical educator should enlist the aid of the music teacher, who could teach the words and music to the children. The game's movements could then be presented in the gymnasium. Long jump rope activities often require the reciting of a rhyme or rhythmic poem.

Elements of Rhythm

Music has essential elements which children should learn to recognize, understand and appreciate. All rhythmic movements are affected by these elements which are present in varying degrees.

With retarded children, it is not essential that the children learn the proper terminology when discussing a piece of music or rhythmic activity. Some may be able to learn the terms and others will not. It is important, however, that the instructor understand them.

BEAT The beat is an underlying steady continuous sound or pulsation that can be heard or felt throughout any rhythmic sequence. Music with a pronounced beat is easier for children to follow.

1. **Even Beat** The underlying beat makes a series of steady, regular and continuous sounds.

2. **Uneven Beat** The underlying beat makes combinations of short and long sounds.

TEMPO Tempo is the rate of speed of the movement or accompaniment. The tempo may remain constant, gradually increase or decrease.

MEASURE The measure refers to an identical grouping of underlying beats. Common measures are 2/4, 3/4, 4/4 and 6/8.

ACCENT The notes or beats which are emphasized more heavily define accent. Usually the first beat in a measure is accented.

INTENSITY The force or quality of the music or accompaniment can be loud, soft, light or heavy.

PHRASE A natural grouping of measures which completes a sequence of sounds or movements. In folk dancing the end of a phrase denotes changes in direction or movement.

PATTERNS Phrases of music can be put together into rhythmic patterns, which is a definite grouping of sounds or beats related to the underlying beat. Children should recognize pattern repeats or changes to another pattern in movement or accompaniment.

Fundamental Rhythmic Activities

In an earlier section of this publication, fundamental movement patterns were discussed in great detail and activities for developing them were presented for each of the four levels: transitional students, primary, intermediate and junior high educable students. These fundamental movement patterns, when performed to accompaniment, are the basis for fundamental rhythmic activities. All of the fundamental movement patterns: locomotor, non-locomotor and object manipulation, both propulsion and absorption, can be performed using the medium of rhythm.

LOCOMOTOR MOVEMENT PATTERNS

1. **Even rhythm** (4/4, 2/4, 3/4, and 6/8 time): walking, running, leaping, jumping and hopping.
2. **Uneven rhythm** (6/8 time): sliding, galloping and skipping.

NON-LOCOMOTOR MOVEMENT PATTERNS Performed in even and uneven rhythm: bending, stretching, twisting, rotating and swinging.

OBJECT MANIPULATION — PROPULSION AND ABSORPTION Performed in even and uneven rhythm: (balls, hoops, wands, etc.): rolling, bouncing, catching, throwing, hitting, kicking, pushing, pulling and lifting.

VARIATIONS The previously mentioned fundamental movement patterns can be performed in response to rhythm in a variety of ways, including:

1. Naturally and expressively in time to accompaniment.
2. Varying the direction of movement. (in place, forward, backward)
3. Varying the intensity of movement. (light, heavy, natural)
4. At different levels. (tall, natural, low)
5. Varying the tempo. (fast, slow, very slow)
6. With a partner or small group.
7. In combination of two or more fundamental movement patterns.
8. Varying patterns, accents, positions.
9. Varying forms of accompaniment.

Creative Rhythms — Identification

Creative rhythms evolve from the immediate interests and daily experiences of children. In an identification rhythm, the child imitates or interprets an identity, for example, of a prancing horse, a marching soldier, a giant, elephant or other familiar characters, creatures or objects. His interpretation is expressed through movement to the accompaniment of a suitable rhythm.

Creativity is released, not taught. Encourage the children to interpret and express themselves in directed and original movement in reaction to rhythm.

1. SUGGESTED ACTIVITIES
   a. TRANSITIONAL STUDENTS The transitional child may not possess much of an imagination, if any. He will be able to imitate or lose himself in interpreting characters with which he is familiar. The identify which he is asked to assume must be concrete. The pretend world may be non-existent to the transitional student. The instructor must assess the students and make his own decision as to whether or not they are capable of releasing their creativity.

   b. PRIMARY EDUCABLE STUDENTS The students in this age level are capable of mimicing common animals, familiar characters, such as soldiers, policemen, firemen, machines, circus performers and nature, such as a swaying tree.

   c. INTERMEDIATE EDUCABLE STUDENTS More complex identification tasks can be introduced. The teacher must still present problems of interpretation within the realm of the child's immediate interests and experiences.

   d. JUNIOR HIGH EDUCABLE STUDENTS By this age, the students may have outgrown any desire they may have had to imitate or interpret identification tasks. Girls may still desire to express themselves as baton twirlers, majorettes, cheer leaders or ballet dancers.

Creative Rhythms — Dramatization

In dramatic rhythms, the children act out an idea, a familiar event or an ordinary every day task, moods or feelings. This can be based on a story, a poem, an emotion or a song. The teacher should merely set the stage and let the child act out the activity.

1. SUGGESTED ACTIVITIES

   a. TRANSITIONAL STUDENTS Creativity may be at a premium with these children. Very simple events or experiences may be dramatized, such as building a snowman, hammering a nail, mowing a lawn and simple sports activities.

   b. PRIMARY EDUCABLE STUDENTS Limited experiences or exposure to ideas may restrict the scope of dramatic rhythms for this group. Ideas or experiences to dramatize may include: flying kites, going fishing, throwing snowballs, interpreting familiar nursery rhymes like the Three Bears, Little Red Riding Hood and others.

   c. INTERMEDIATE EDUCABLE STUDENTS Ideas and experiences for dramatization must equal the maturity of the children of this age group. Involve fundamental movement patterns when possible.

   d. JUNIOR HIGH EDUCABLE STUDENTS Not applicable.

Singing Games

Singing games are actually a dance where the children sing verses which give direction to the movement pattern which they are to perform. Singing games are a cultural heritage, their origins long lost in history. They are usually not complicated, yet they give children valuable experience in using their bodies rhythmically, utilizing simple locomotor and non-locomotor movements. They often involve some creative rhythmic action on the part of the performers.

Perhaps one of their most valuable assets is the group cooperation necessary to successfully perform the dance. Cooperation with the music teacher may again be sought. The words and melodies necessary for playing the singing games can be taught during the music instruction period. The singing game can then be played in the gymnasium.

1. SUGGESTED SINGING GAMES

a. TRANSITIONAL STUDENTS While many exhibit communication difficulties, they can still find enjoyment and success from participation in simple singing games. Emphasis should not be placed upon perfect execution of the movements and actions demanded by the singing game. Rather, the instructor should teach the students those movements necessary to participate in the activity. Some suggested singing games to use with the transitional student are:

—**Did You Ever See a Lassie.** (Victor Record 21618 B; Folkraft 1183). Skipping movements in circular pattern followed by imitation of actions demonstrated by leader in center of circle. If unable to skip, substitute sliding or galloping.

—**Farmer in the Dell** (Victor Record 21618 and No. 45-5066; Folkraft 1182). Circular walking with hands joined. It involves selection of circle players by another in the center.

—**Mulberry Bush** (Victor Record 20806, No. 45-5065; Columbia 90037—V; Folkraft 1183). Circle formation with hands joined. Walking or skipping movements followed by imitations of daily work tasks.

—**Looby Loo** (Victor Record No. 20214). Game represents a little boy who hates to take a bath. It involves circular movement with hands joined in a variety of patterns — sliding, walking, galloping or running.

b. PRIMARY EDUCABLE STUDENTS Most of the singing games used with transitional students can be used with the primary educable student. They can be expected to learn the words, melodies and movement patterns necessary to perform the singing games. Some suggested singing games are:

—**London Bridge** (Victor Record No. 20806) Two children with uplifted hands form a bridge, under which a line of children (train) pass while singing. The game has an element of daring since the children forming the train attempt to pass under the bridge without being caught when it falls.

—**Ten Little Indians** (Folkraft 1197). Circle formation with ten of the children numbering off. Involves number concept with creative imitation of Indian dancing.

—**Captain Jinks** (Victor Record 20639). Marching movements in circular direction. May be made more complicated by requiring skipping, bows and curtsies and promenading.

—**Pease Porridge Hot** (Folkraft 1190). First part involves patty-cake rhythm; second involves skipping around circle with a partner.

c. INTERMEDIATE EDUCABLE STUDENTS Many of the children at this age level may be too mature for singing games and think of them as babyish. Don't insult their chronological age; instead, select singing games that involve more complex movement patterns or combinations of movement patterns. More time should be spent on basic folk dances, rather than singing games. Some suggested singing games for this age level include:

—**Thread Follows the Needle** (Victor Record No. 22760—Album E87; Pioneer 3015). The game involves a line of children with hands joined which follows a leader in a complex interweaving movement pattern.

—**Yankee Doodle** (Victor Record No. 22760). Performed in a single circle, all facing in one direction around the circle, with galloping, bowing, curtsying, sliding, stamping and clapping movements performed by the participants.

—**Broom Dance** (Victor Record No. 20448). Formation involves a double circle, partners facing, boys inside, girls outside, with an extra person with a broom in the center. It involves marching, skipping and an exchange of partners.

d. JUNIOR HIGH EDUCABLE STUDENTS Singing games, per se, will not be used at the junior high level. Emphasis will be placed on the rhythmic activities of folk dance and recreational dances, such as square dancing, social dancing and mixers.

Folk Dances

A folk dance may be defined as a traditional dance of a given people or country. Folk dances have movement patterns, similar to some games, which are repeated over and over with music to accompany the action.

Folk dancing provides a tool for both socialization and recreation. Under skilled instruction and leadership, ease of manner, kindliness, courteous behavior and a feeling of responsibility for the success of the social situation can be expected to be reasonable outcomes of folk dancing. Joy in participation and a feeling of personal and group achievement are additional outcomes. Depending upon the intellectual level of the group involved, the cultural background of the dance may be given to set the mood of the dance. The rhythm and step pattern as a whole are presented next and finally, parts of the dance are practiced, without and with accompaniment.

DANCE FORMATIONS The retarded children may be able to assume the desired formation from a verbal command. However, it is often more feasible to use charts or a chalkboard to illustrate the formation. From the visual cue, move to actual demonstration of the formation required for the dance, aiding the youngsters in assuming the correct formation.

1. Single Circle Formations
   a. All facing the center, without a partner.
   b. All facing counter-clockwise.
   c. All facing the center, by partners.
   d. By partners, with partners facing.

2. Double Circle Formations
   a. Partners facing each other.
   b. Partners standing side by side, facing in a counter-clockwise direction.

3. Other Formations
   a. Longways set.
   b. Square Dance Formations.

DANCE POSITIONS Many dances require that the girl clasp the boy's hand, the boy holding his palms up and the girl joining the grip with her hands in a palms down position.

1. **Partners-Facing Position** Partners face each other and join both hands.

2. **Side by Side Position** Partners stand side by side, the girl usually on the boy's right. Inside hands are joined.

3. **Closed Position** Often referred to as social dance position, the boy faces the girl, holding her right hand in his left hand. He places his right hand on the small of her back. She places her left hand on his shoulder.

4. **Open Position** The closed position is assumed. Then the boy turns to his left; the girl to her right, so that both face the same direction and are side by side.

5. **Varsovienne Position** Standing side by side, facing the same direction, the boy holds the girl's right hand in his right, behind her at shoulder height.

6. **Peasant Position** Partners facing, the boy places both hands on the girl's waist. She places both hands on his shoulders.

7. **Skaters' Position** A crossed arm position, the dancers standing side by side, facing in the same direction, girl's right hand held by boy's right; girl's left by boy's left, in front.

1. SUGGESTED FOLK DANCES

   a. TRANSITIONAL STUDENTS The transitional students will, more than likely, find their greatest success and enjoyment in participating in the simple singing games discussed earlier. Very simple, uncomplicated folk dances may be introduced, such as:

      —**How Do You Do, My Partner** (Victor Record No. 21685). Varying the original directions,

this folk dance may be performed in a single circle formation, partners facing. Its actions involve bowing and curtsying, shaking hands, all facing inward, joining hands and circling in a desired direction, using a walk, slide, gallop or skip.

—**The Muffin Man** (Folkraft 1188). This folk dance requires a single circle formation, facing inward with hands joined. One child, the Muffin Man, is in the center. Children in the circle stand and sing, while Muffin Man moves around the inside by skipping or galloping. He selects one to skip with him; the pair select two more; the four select four more and so on, until all are skipping or galloping, around the room.

b. PRIMARY EDUCABLE STUDENTS Singing games will represent the major portion of time spent on rhythmic activities for this group. Simple folk dances, requiring single or double circle formations, with simple dance positions may be introduced. Do not sacrifice fun for complexity. Suggested folk dances include:

—**Let Your Feet Go Tap, Tap, Tap** (Folkraft 1184). Alter original formation and use a single circle formation, partners facing. It involves tapping the feet and clapping the hands in time to music. Locomotor movements of various types may be substituted for skipping around the circle, by the group with hands joined.

—**Dance of Greeting** (Victor Record No. 20432; Folkraft 1187; Russell 726). This simple folk dance requires a single circle, all facing the center, by partners without hands joined. The actions involve bowing, curtsying, stamping, rotating or turning and running or sliding to the left or right.

—**Chimes of Dunkirk** (Victor Record No. 17327; Folkraft 1188; Columbia A-3016). Single circle, partners facing each other. Movements essential to the dance are stamping the feet, clapping the hands, turning a partner with hands joined and sliding sideward.

—**Shoemaker's Dance** (Victor 20450; Folkraft 1187; Columbia A-3038). This folk dance is performed with partners facing, in a double circle, boys on the inside. It combines the imitation of a cobbler's hammering and cutting with scissors, with skipping in a side by side position with a partner.

—**Paw Paw Patch** (Victor 45-5066; Folkraft 1181; Honor Your Partner 103). Actually a lead-up to the Virginia Reel, this dance requires a longways set of couples, boys in one line, girls in the other. It involves skipping and turning a partner.

c. INTERMEDIATE EDUCABLE STUDENTS More complicated folk dances may be given to this group. Formations and positions may increase in complexity. Include:

—**Kinderpolka** (Victor No. 20432). Children form a single circle, partners facing, hands joined and extended to the side at shoulder height. Although called the Children's Polka, the polka step is not used. The movement patterns used include: sliding, running in place, clapping, turning and jumping.

—**Cshebogar** (Victor No. 20992). Single circle, boys and girls alternating, hands joined. Group slides eight slides left; then eight slides right; takes three steps into the circle, three steps out and partners turn.

—**Bingo** (Victor No. 45-6172; Folkraft 1189). Double circle, partners side by side, inside hands joined, boy on girl's left. Partners walk around circle, singing the words. Partners form one large single circle using a four step sequence in, out, in and out of the circle. Then they move individually around the circle, walking slowly five steps, boys in one direction, girls in the other, until a new partner is met.

—**Glow Worm Mixer** (Folkraft E1158). This mixer folk dance uses double circle formation, by partners, all facing counter-clockwise. Using a series of four patterns of four steps each and elbow turns, the dance proceeds with changing of partners. It can be used as sort of a get acquainted activity.

d. JUNIOR HIGH EDUCABLE STUDENTS Folk dances involving other formations and a variety of dance positions should be presented.

—**Ace of Diamonds** (Victor No. 20989). Double circle formation, boys on the inside, partners facing. Movements include clapping the hands, elbow turns with the partner, introduction of step hops and two step or polka step.

—**Crested Hen** (Victor No. 21619). Sets of three spaced about the room, either a boy between two girls or vice versa. Action consists of step hops and turns by one member of a set through an arch formed by the other two in the set.

—**Heel and Toe Polka** (Victor No. 25-1002). Double circle, boy on inside, partners in either a Varsovienne or skaters' position. Action involves alternate touching of heel and toe, running steps and polka steps around the room.

—**Virginia Reel** (Victor No. 35771). Using a longways dance pattern, six couples to a set, forming two lines, boys in one, girls in the other. Light springy steps are used and various actions found in square dancing are used, such as dos-a-dos and promenading.

Square Dances

Square dances may be classified as American Folk Dances. The Virginia Reel could be placed under this heading, but was discussed previously under folk dances. When mention is made of square dancing, one immediately thinks of barn dances, fiddles, cowboys and cowgirls. Square dancing is a part of our American heritage which is still enjoyed today. Like social dancing, square dancing has much recreational value, as proven by the many square dance clubs in existence.

A knowledge must be developed regarding the various terms and movements in a square dance. Once learned, however, the performer should be able to perform almost all square dances to musical accompaniment and vocal directions sung by a caller.

SQUARE DANCE TERMINOLOGY

—**Allemande Left** Boy faces corner, joins left hand with corner's and turns corner.

—**Allemande Right** Same as allemande left, except right hands are joined.

—**Balance** Two steps away from partner and bow if a boy, curtsy if a girl.

—**Break** Release hands.

—**Dos-a-dos** Boy and girl circle each other, passing right shoulder to right shoulder and back to back, returning to original position.

—**Elbow Swing** Hook right or left elbows and turn once.

—**Grand Right and Left** Partners face, touch right hands and pass on by to next, touching left hands and on around the circle until reunited. Boys go counter-clockwise; girls clockwise. Usually preceded by an Allemande Left and followed by a Promenade.

—**Head Couples** First couple (backs to caller) and third couples in a set or square.

—**Home Position** Original position of each dancer in the set.

—**Promenade** Boy takes partner in skaters' position and all couples move counter-clockwise around the circle. Usually follows an Allemande Left and a Grand Right and Left.

1. SUGGESTED SQUARE DANCES
   a. TRANSITIONAL STUDENTS It is doubtful that these students will ever learn to square dance. It may be possible to place a transitional student, who exhibits a readiness to square dance, in with a group of older educable students. This publication lists no square dances for transitional students based on the premise that they will find much more satisfaction and success in participating in the simple singing games and possibly one or two basic folk dances.

   b. PRIMARY EDUCABLE STUDENTS As with transitional students, it seems more feasible to develop the various movement patterns to music and to offer basic folk dances which involve many of the steps and actions included in square dances. No square dances are listed for primary students.

   c. INTERMEDIATE EDUCABLE STUDENTS Simple square dances with easily understood calls may be introduced at this level. Each dance must be broken down and the various parts learned without music to a call. Be sure that the terminology necessary to the particular dance is familiar to the students. Music can then be combined with the vocal call.

—**Old Dan Tucker** (Decca No. 18224—Album 278). Couples join hands in a single circle with one odd person (Dan Tucker) in the center. This dance, although not performed in square dance formation, requires knowledge of many of the necessary movements found in square dancing, such as the running-walk step, the balance, Allemande Left, Grand Right and Left and Promenading.

—**Virginia Reel** Although listed previously under folk dances, the Virginia Reel is ideal for teaching many of the movements necessary to square dancing, such as elbow swings, dos-a-dos and promenading.

—**Captain Jinks** (Decca No. 18222—Album 278). Performed in a single circle, girls in front of boys with the boy's hands on his partner's shoulders, this dance includes many square dance movements, like dos-a-dos with corners and partner, Allemande Left and Right, swinging a partner, balances and promenading.

—**Duck the Oyster, Duck the Clam** (Victor No. 20592). Performed in a square or set, composed of four couples this is a basic square dance. Terms essential to its performance are first couple (backs to music), balances, swinging, Allemande Left, Grand Right and Left and promenading.

d. JUNIOR HIGH EDUCABLE STUDENTS Having learned the various terms and movements essential to performing a square dance, these students should be offered a variety of square dances. Care must still be used in teaching the various parts of the square dance before the whole dance is put together. Some suggested square dances for this level are:

—**Oh Johnny, Oh** (Folkraft 1037). This is a true square dance performed in a square set of four couples. It involves swing the partner and corner, Allemande Left, dos-a-dos and promenading.

—**My Little Girl** (Folkraft 1036). Square set of four couples. It requires promenading, lady's chain, Allemande Left, Grand Right and Left and swinging.

—**Hot Time** (Folkraft 1037). Performed in a square set of four couples, this square dance has a singing call, which may be sung by everyone.

Social Dances

Retarded children who have received an adequate background in fundamental rhythmics, singing games and creative, folk and square dancing should be ready, by the time they reach the junior high level, for social dancing. Basic steps learned in group and couple dances are essential to social dancing. It is suggested that social dancing be taught to educable retarded youngsters at this level, since they will sooner or later be exposed to social dancing.

BODY POSITION The partners face each other, with the boy's right arm around the girl's waist, hand touching her back lightly. He extends his left arm to the side at a comfortable height and holds the girl's right hand lightly in his left hand. The girl rests her other hand lightly on the boy's right shoulder or arm. Both face with their feet pointed forward, standing a comfortable distance apart and hold their bodies erect with their heads up.

LEADING The boy leads by exerting pressure with his right hand, arm or upper part of his body. The lead should be firm and positive and the girl should be alert and ware of his intended lead. A good dancer mixes his steps, going forward, backward, sideward and turning so that the girl is not contantly backing up.

BASIC STEPS This publication includes all dances which should be taught to the retarded child if he is to find enjoyment and success at social dance functions.

—**Two Step** This is a dance step performed to music in 2/4 time. It involves sliding the left foot forward, right foot closing to the left and sliding the left foot forward again. Then, the right foot slides forward, the left closes and the right slides forward again. This sequence is repeated going forward, backward or sideward.

—**Polka Step** This dance step is the same as a two step, except that a hop is added at the beginning or end of the step.

—**Schottisch Step** This dance step is necessary to many advanced folk dances, yet it can be performed independently. It consists of a one-two-three-hop; one-two-three-hop; step-hop; step-hop; step-hop; step-hop sequence.

—**Waltz** The waltz is best learned by walking slowly at first in the following sequence: step left, step right, close left; step right, step left, close right and later: step, step, close; step, step, close. Once this sequence has been learned, the backward and box waltz may be introduced.

1. SUGGESTED SOCIAL DANCE ACTIVITIES

   a. TRANSITIONAL STUDENTS Although few, if any, will develop into a Fred Astaire or an Arthur Murray, some competency in social dancing should be taught. The transitional students enjoy music and want to emulate others who can dance. At least teach the proper dance position. Even though they may never progress beyond walking or stepping forward, backward or to the side, at least they will look like the other couples on the dance floor.

   b. PRIMARY AND INTERMEDIATE EDUCABLE STUDENTS Depending upon their competency in performing fundamental movement patterns, retarded children at this level can be taught the social graces, dance position and manners through a good program of folk and square dancing. One of the main goals is to eliminate or cool off the boy-girl antagonism normally exhibited by children in these two groups.

   c. JUNIOR HIGH EDUCABLE STUDENTS At this level, most boys and girls begin to realize that there is an opposite sex and that it is not so unenjoyable to experience physical contact with the opposite sex through social dance. Many of the more complicated folk and square dances involve the four social dance steps cited previously. Provide opportunities to learn the two step, the polka, the Schottische and Waltz steps. It may prove most valuable to teach the steps in mass formation first, with the students following the directions given by the leader and imitating his movements. Later, music may be added and finally, dancing with a partner may follow.

Educational Rhythmics

No discussion of rhythmic activities for the mentally retarded would be complete without mentioning the work of Ferris and Jennet Robins, who have developed a method called Educational Rhythmics for Mentally and Physically Handicapped Children. This remedial method developed by the husband and wife team is intended for use in the rehabilitation of mentally and physically handicapped children. Their method is designed to appeal to the whole child, both body and mind. Their method makes use of all natural communication between the child and teacher in order to influence the child. Music, words, colors, pictures and movement combine harmoniously to serve as tools for progressive therapy. The main goal of the Robins' method is to coordinate body and mind in pleasant animated, rhythmic movement.

Sources of Records for Rhythmic Activities

Bowmar Records
Dept. J-569
622 Rodier Dr.
Glendale, Calif. 91201

Canadian Folk Dance Record Service
605 King St., West
Toronto 2B
Ontario, Canada

Educational Activities, Inc.
P. O. Box 392
Freeport, New York 11520

Educational Recordings of America, Inc.
P. O. Box 6062
Bridgeport, Conn. 06606

Folkraft Records
1159 Broad Street
Newark, New Jersey 07714

Hoctor Educational Records, Inc.
P. O. Box 38
Waldwick, New Jersey 07463

Kimbo Educational Records
P. O. Box 55
Deal, New Jersey 07723

RCA Victor Education Dept. J
155 E. 24th Street
New York, New York 10010

Square Dance Square
P. O. Box 689
Santa Barbara, Calif. 93100

Stanley Bowmar Co., Inc.
4 Broadway
Valhalla, New York 10595

Games of Low Organization

The urge to play is a dominant characteristic found in people of all ages and all levels of intellectual functioning. For the child, knowing how to play a variety of games is important. Active games of low organization are the sports of young children and are essential, not only to the physical education program, but to the child's free play on the playground and in his neighborhood.

Games of low organization are so termed since they require few rules and little or no equipment. They may be adapted to suit the space or equipment available, the ages and abilities of the participants and the size of the group or class.

This component of the physical education program is unique in that the activities used not only serve as an end, but also as a means of teaching other elements of the program. Basic movement patterns, physical fitness and recreational skills are fostered through guided play. Other factors such as fair-play, cooperation, team work and competition are an inherent characteristic of games of low organization.

Games are not confined to the younger child, but continue in use through all age levels and even in recreational activities of young people and adults. However, the percentage of time spent playing games of the low organization variety should decrease as the children grow older. In the intermediate and junior high levels, games will be used to add fun to the learning of more complex and highly organized lead-up games to seasonal sports.

In summary, games of low organization provide an outlet for pent-up tensions. They put to practical use the various basic movement patterns learned previously. Finally, they offer an atmosphere of excitement and fun.

Types of Games

INTRODUCTORY GAMES At the beginning of a school year, the physical educator may want to use games to establish class routines, response to signals and the ability to quickly form the various formations essential to physical education activities. Introductory games may also be used at the beginning of class periods to allow the children to release their pent-up emotions through active, large muscle movements with all children being active at the same time.

RUNNING GAMES These include pursuit games, where a chaser or chasers pursue an individual or individuals who flee, attempting not to be caught, tagged or struck by an object, such as a ball. Various formations may be used. The entire class may be scattered throughout the play space. Play may be confined to circles, within lines or boundaries and may be small or large group play.

Primary running games will usually involve all of the players in one group. Later, the idea of sides, where two or more groups compete against each other, will be introduced. Team loyalty, the working together as a team to win, will be fostered. Children enjoy vigorous, free running games which have the element of daring.

OTHER LOCOMOTOR GAMES Games which require basic movement patterns, other than running, including jumping, hopping, leaping and skipping games. They are usually played in lines and circles and as relay races. The individual pits his skill against the skill of others through challenging tasks requiring jumping or leaping for height and distance. Most often, these games are played in relay formation or line formation, either with the children taking turns or performing all at the same time.

BALL GAMES These games combine basic locomotor movement patterns with those involving object manipulation. They usually play a preparatory role in developing the skills necessary for more complex seasonal sport activities. Play is usually in small groups to enable all children to have many turns.

RELAY RACES Relays are a form of games in which each child is on a team and the members of each team perform the same action, in turn, with the team whose members all complete the action first being the winner. Relays may also be used in practicing skills, where the element of competition is not present. Since relay races are actually a team game, they are not recommended for early primary grade levels because of the confinement and cooperation which is too advanced for lower primary children.

Relays require self-control, since the team members must wait their turn. They must respond quickly when their turn comes and the rules are usually quite strict.

TEAM GAMES These may include running games, ball games or variations of seasonal sports. Present in team games are the elements of using individual skill and group strategy to outwit the opposing team. These games may be quite simple or highly organized, requiring scoring, goals, fouls and penalties for infractions of the game's rules. Team games will most likely be presented to transitional and primary educable students in a very low organizational manner.

INDIVIDUAL AND DUAL GAMES These recreational games may be played on the school playground or at home. They include games which necessitate competition between two, four or small groups of players. This type of game helps the retarded child to learn self-direction of his play and helps him to "fit in" with his normal peers at school or in his neighborhood.

CLASSROOM GAMES Often, there is a need for games which can be played without strenuous activity and in limited play spaces. This need may occur to break the monotony of structured classroom routine or whenever inclement weather prevents the children from going outside during recess. Classroom games may also combine game situations with learning situations in all academic areas.

Classroom games should be planned with considerations for: space available, safety of participants, resultant noise, equipment needed and participation by all.

Semi-active classroom games are simply modifications of active games, played by altering the means of movement or the implement or the object to be manipulated. Relays can also be semi-active.

Mental or guessing games involve elements of counting, concentration and searching to find a hidden object.

Target games involve the use of acquired skills to propel objects at a target such as tossing beanbags or dart board games.

Quiet games are recreational games played by two or more students, such as checkers, dominoes, game board activities and card games.

Suggestions for Conducting Games

Select games by determining which games are most suitable for the particular individual or group involved, taking into consideration their mental age as well as their chronological age and their physical development.

The person conducting the game should have a thorough knowledge of it, including equipment necessary and safety hazards present.

Eliminate lengthy instructions or directions. Give only those essential to playing the game and play it!

If the game requires lines or boundaries, paint or mark them clearly. Do not require that the children imagine where the boundaries are.

Place the children in approximately the same formation as required by the game while explaining it. Retarded children, especially, need concrete examples.

Identify opposing teams in some manner.

Allow for maximum participation of students. Elimination-type games and running games with one chaser and one runner should not be used or if used, modify the rules. If necessary, form several small groups. Prevent pupils from standing in line awaiting a turn, if at all possible.

When conducting a game, frequently correct deviant movement patterns and give encouragement and reassurance.

Provide opportunities for leadership. Allow competent students to select, explain and conduct games. Guide them toward self-direction.

Play the game with the class occasionally. Children enjoy having the teacher join in with their play.

Do not play a game to death. Change games frequently to avoid monotony and boredom. Keep in mind the attention span of the children.

Do not over-emphasize competition. Sportsmanship can be taught through losing as well as winning.

Stress safe play. Never use walls as a goal. Suitable footwear should be worn. Watch for overzealous tagging or striking with an object. Especially, protect the child with glasses.

Common Deviations

Falling or sliding across a goal line or at the conclusion of a locomotor movement.

Failure to avoid collisions with other students or objects in the play space.

Allowing oneself to be tagged or caught or hit by a thrown object in order to be "It."

Deviations in locomotor and non-locomotor movement patterns causing incorrect actions required by the game.

Failure to admit having been caught, tagged or hit.

Over-exuberant actions of tagging, catching or throwing, with a possibility of harming another child.

Failure to observe boundaries, lines or to stay in the proper formation.

Overly loud noise by children while playing a game.

Using bias when choosing other students to be "It" or always tagging or hitting the same student with an object.

Disregard for rules necessary to play the game correctly, such as moving before the proper signal is given.

1. SUGGESTED GAMES OF LOW ORGANIZATION

    a. TRANSITIONAL STUDENTS Very simple games with few oral instructions necessary to play the game. Avoid games requiring standing in line or of a highly organized nature. Relay races may prove useless, even with older transitional

students as they have difficulty in comprehending the team concept. Conduct:

—Introductory games which teach class routine, response to signals and following of directions. Formations of various types, such as circles and lines may be taught through the use of simple games. The introductory games may substitute for traditional calisthenics at the beginning of a class period.
—Running games with an emphasis on being able to run without colliding with another. Running should be performed in a straight line to an established finish line; or the run may be ended on a signal, such as a whistle or clap of the hands. Pursuit games may not be suitable for use with transitional students since they often forget who they are chasing and what they are supposed to do when the fleeing child is caught.
—Games which require many basic locomotor movement patterns, including walking, jumping, hopping, leaping, etc. Jump rope lead-up activities are ideal, such as Jump the Snake, High Water and Jump the Shot.
—Ball games which require simple propulsion and absorption patterns. Begin with simply handing a ball to another circle player, as in Circle Animal Chase. Dodgeball games may be played if they have some competency in rolling or throwing and can dodge an oncoming object.
—Individual and dual games, such as Hopscotch or Tetherball. Beanbag tossing at targets and very basic rope jumping may prove feasible.
—Classroom games with simple requirements, such as Follow the Leader, Changing Seats, Squirrel and Nuts and chalkboard games.

b. PRIMARY EDUCABLE STUDENTS Most of the various games of low organization used with normal primary students may be used with the primary educable students. Mental age as well as physical development must be considered in selecting games. Stress cooperation in sharing equipment or turns and playing without arguing with others. Concepts of rules, boundary lines and direction following should also be learned. Conduct:

—Games requiring various locomotor skills, such as running fast, turning and running to escape the chaser, dodging a tagger, tagging a runner, changing directions, jumping, hopping and leaping.
—Games involving movement around a circle, stopping quickly without losing one's balance, changing partners or running with a partner.
—Ball games requiring the passing of an object quickly from one child to another; tossing, bouncing and catching balls; throwing at moving objects and dodging an oncoming object.
—Individual and dual games played on the playground or at home, such as Hopscotch and rope jumping.

—Classroom games commonly played at home or at parties.

c. INTERMEDIATE EDUCABLE STUDENTS More complex games with higher organization may be introduced. The team concept should evolve at this level. Stress getting along with others, leadership and followership, appreciation of playing well, honest and fair play, without cheating, self-direction and observation of rules and boundaries. Include:

—Running and tag games should require running at top speed straight to a goal, dodging a tagger and changing direction of movement quickly, without losing one's balance.
—Running as a team member against another team and strategy planning should be provided through games like Cowboys and Indians, Stealing Sticks or relay races.
—Ball games should give the intermediate child an opportunity to show his ability to handle balls accurately, propelling them at a moving or unguarded object.
—Individual and dual games of higher complexity such as Four Square, Tetherball and other games played at school on the playground or at home.
—Classroom games with which they will come into contact at home or at parties, such as Brain Teasers or Table Games and Puzzles.

d. JUNIOR HIGH EDUCABLE STUDENTS Since the percentage of time spent on games of low organization should decrease as the child grows older, little time will be spent on low organization games, per se, at the junior high level. Conduct these games for specific purposes, such as to break the monotony of a lesson or to teach specific sport skills. Include:

—Some mass running, chasing and tag games requiring quick deceptive movements and body control.
—Running as a team, emphasizing speed adjustment and direction changes to avoid a tagger, as in Flag Football. Strategy found in seasonal sports can be developed through games like Prisoner's Base or Capture the Flag.
—Ball games as lead-ups to seasonal sports.

Manipulative Activities

Manipulative activities are presented here as that portion of the program of physical education and recreation for the mentally retarded which involves the handling or manipulation of some kind of object, piece of equipment or small apparatus used in movement oriented activity.

Although manipulative activities usually involve the hands, they can also involve the feet and other body parts. Through manipulative activities, those fundamental movement patterns previously learned are put to practical use. Manipulation of a variety of play objects can strengthen eye-hand, eye-foot and eye-total body coordination and manual dexterity.

Objects to be manipulated in this type of play activity include beanbags, balls, hoops, wands, paddles and balls, gym scooters and parachutes. Gym or floor hockey equipment and jump ropes may also be considered as objects to be manipulated. The Filipino dance called Tinikling is presented here rather than in the Rhythmic Activities section because it involves the manipulation of bamboo poles while another child performs locomotor movements to the accompaniment of music.

The reader is urged to refer to the discussions of object manipulation both propulsion and absorption found earlier in this publication under the section entitled Fundamental Movement Patterns.

Suggestions for Conducting Manipulative Activities

Make certain that enough objects are on hand so that each child has an object to manipulate. Children, in particular retarded children, should not be made to stand in line, awaiting their turn to manipulate the object. When working in pairs, one item is sufficient for two children. The parachute, of course, may be used by an entire class. For the Tinikling Dance, a set of two bamboo poles and two boards will accommodate two manipulators and one or more dancers.

Use bean bags and fleece balls in activities to develop the propulsion and absorption skills for younger children. Soft objects present little danger of harm and aid in developing confidence. For the transitional student, the instructor may even resort to using balloons to elimiate fear.

Begin at a low level of expectation where the child can find early success. Expand or increase the complexity of the manipulative activity as skills and competencies increase.

Initially conduct manipulative activities on an individual basis. Progressively move to partner and then to group activities.

BEANBAG ACTIVITIES Beanbags present an ideal object with which to learn and develop the movement patterns of object manipulation patterns. Propulsion may be through an underhand toss, an overhand throw or a kick with the foot. Absorption can be through catching a beanbag or balancing or carrying it using various body parts. For transitional and primary educable students they should precede instruction involving inflated or hard balls.

1. SUGGESTED BEANBAG ACTIVITIES

a. TRANSITIONAL STUDENTS As mentioned previously, the physical educator may want to use balloons to precede instruction with beanbags. The beanbags can be of assorted colors, but should all be of uniform size and weight with a cloth covering which is soft and yielding, enabling the child to grasp it firmly. Skills learned through beanbag activities may include:

—Balancing a beanbag on the head, shoulder, upper arm, wrist, knee and other body parts while standing; while walking; while running.
—Tossing a beanbag up with two hands, catching it in both hands.
—Tossing it up with one hand, catching it with both; catching it with one hand.
—Tossing underhand for distance; throwing overhand.
—Tossing underhand at a target, such as a box, basket or beanbag board.

b. PRIMARY EDUCABLE STUDENTS All of the above activities should be performed. Additional activities may include:

—Tossing and catching one beanbag, standing in one place; while walking; while running.
—Tossing beanbag from one hand to the other.
—Tossing and catching with a stunt in between.
—Partner activities, such as tossing a beanbag underhand to a partner who catches it and tosses it back.

c. INTERMEDIATE EDUCABLE STUDENTS Complexity of activities will increase as skill increases. Recreational activities may be conducted. Intermediate beanbag activities might include:

—Tossing a beanbag sideward overhead from one outstretched hand to another.
—Tossing a beanbag from behind overhead and catching it in the other hand in front.
—Balancing a beanbag on one foot, kicking it into the air and catching it.
—Juggling two beanbags; three beanbags.
—Performing various locomotor movement patterns while balancing a beanbag on a body part.
—Contests involving tossing beanbags at targets with holes of varying numerical value.

d. JUNIOR HIGH EDUCABLE STUDENTS Depending upon the mental age of these students, beanbag activities may not be suitable at this age level. If used, increase the complexity of stunts to be performed and the difficulty of scoring points when tossing at targets.

PLAYGROUND BALL ACTIVITIES Inflated playground balls of various sizes (5-inch, 8-inch or 12-inch) may be used in developing skills of propulsion and absorption, such as rolling, tossing, throwing, bouncing, kicking, striking and use in group games.

1. SUGGESTED PLAYGROUND BALL ACTIVITIES

a. TRANSITIONAL STUDENTS Balls used should be of reasonable size and weight. Larger playground balls may be easier to manipulate. The balls may be deflated slightly to make manipulation less difficult. Activities should include:

—Rolling a ball against a wall and catching the rebound.
—Rolling a ball along the ground, running after it and picking it up.
—Rolling a ball at a target, such as a plastic bowling pin or milk carton.
—Bouncing and catching the ball.
—Bounce a ball as high as possible and catch.
—Bounce against a wall and catch.
—Bounce to a partner and catch.
—Toss and catch with both hands.
—Kick a stationary ball.

b. PRIMARY EDUCABLE STUDENTS All of the activities listed for transitional students should be provided, plus:

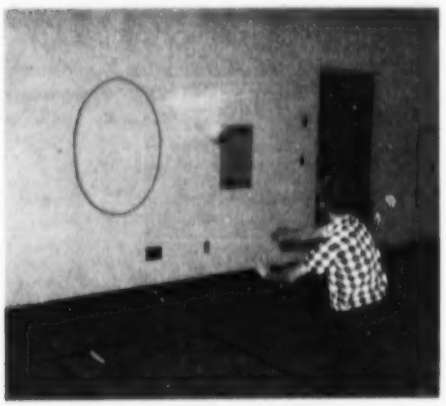
—Bowling (rolling) a ball against a wall or to a partner and catching it, using the hands or trapping it with the foot.
—Bouncing and catching own ball; ball bounced by a partner.
—Continuous bouncing (dribbling) using both hands; one hand; other hand; alternating hands, while standing in place; while walking.
—Catching a tossed ball.
—Throwing underhand or overhand at targets, stationary or moving, as in Circle Dodgeball.
—Throwing balls for distance.
—Kicking stationary or slow-moving balls.

c. INTERMEDIATE EDUCABLE STUDENTS Ball activities will be somewhat different from earlier experiences. Balls used in the various seasonal sports will replace the playground ball to teach lead-up skills for seasonal sports. Include:

Throwing and catching:
—soccer balls, junior-size basketballs, volleyballs and softballs tossed vertically into the air.

—softballs high against a wall and catching the fly on the rebound.
—soccerballs and junior size basketballs passed against a wall, from a short distance and caught on the rebound.
—small rubber balls against a wall, catching on first bounce or on the fly.

Throwing and catching with a partner:
—softballs using an underhand pitch.
—overhand softball throws.
—high fly balls, thrown over a net, using softballs, soccerballs, volleyballs and junior-size footballs.
—ground balls, either rolling or bouncing, using a softball (fielding).



Accuracy throwing at a target:
—underhand pitches or overhand softball throws.
—using junior-size footballs and basketballs.

Distance throwing:
—overhand throw using softballs, soccer balls or junior-size footballs and basketballs.

Dribbling:
—a soccerball, using short, controlled kicks.
—a junior-size basketball, using the hands.

Dribbling and passing to a partner:
—junior-size baskeball and soccerballs.

Distance kicking:
—junior-size football from a tee; punting.
—soccer place kick.

Accuracy kicking of soccer balls:
—passing to partner.
—place kicking through soccer goal.

Striking a volleyball, serving or volleying.

Batting a softball from a batting tee; batting a pitched softball.

d. JUNIOR HIGH EDUCABLE STUDENTS If previously mentioned ball skills have been mastered to some degree of proficiency, the junior high students will learn and develop skills using balls characteristic of seasonal sports, such as:

Basketball:
—passing and catching, using a variety of passes, such as chest pass, two-hand overhead passes.
—shooting at the goal, using basic shots, such as two-hand push shot, lay-up shots, one-hand push shots and free throws.
—dribbing, followed by passes, shots and pivots.

Football:
—passing, including the forward and lateral passes and a pass from center stance.
—catching of footballs which have been propelled by a forward pass, lateral or punt.
—kicks, including place kicking and punting.

Soccer:
—place kicking and goalie punting for accuracy and distance.
—dribbling and passing with the feet.
—trapping, rolling soccerballs.
—heading soccerballs in flight.

Softball:
—throwing for distance and accuracy to bases.
—pitching underhand strikes.
—catching flyballs; fielding grounders.
—batting pitched softballs; bunting; hitting fungoes.

Volleyball:
—serving overhand and underhand.
—volleying or passing to a teammate; over the net.
—spiking over the net.

BOWLING ACTIVITIES Skills essential to successful participation in the sport of bowling may be developed through physical education activities. Bowling is a recreational sport which is reasonably inexpensive and can be enjoyed by all ages.

1. SUGGESTED BOWLING ACTIVITIES

a. TRANSITIONAL STUDENTS Bowling skills instruction will possibly be limited to informal rolling of rubber playground balls of approximately identical size to a bowling ball. The younger transitional students should be able to develop sufficient bowling skills to enable them to enjoy bowling with plastic bowling sets. The older transitional students may progress to a level of performance enabling them to bowl at bowling lanes, as experienced at the Walworth County Special School in Elkhorn, Wisconsin. Bowling activities for transitional students might include:

—Rolling an 8-inch playground ball with two

hands from between the legs, using a wide straddle stance:
—toward a wall.
—to a partner.
—at a target, such as a milk carton, plastic bowling pin or even a regular bowling pin.
—Bowling (one-handed) a playground ball using the regular bowling pendulum swing.
—Bowling, using a Cosom Gym Bowl set, teaching the setting up of pins and the concept of bowling two balls to knock down all ten pins.

b. PRIMARY EDUCABLE STUDENTS As with transitional students, bowling activities will be confined to basic rolling skills and play with plastic bowling sets. Scoring may be difficult to teach, but the strike and spare concept should be taught at this level.

c. INTERMEDIATE EDUCABLE STUDENTS If sufficient rolling skills have been learned and adequate strength has been developed to enable the intermediate student to control a regular bowling ball, the instructor can progress to regulation bowling by providing activities teaching:
—Bowling a Cosom bowling ball having three finger holes at ten plastic pins, adjusting the distance bowled to insure success in knocking down pins.
—Bowling with the Cosom Gym Bowl set, using a one-step approach, executing the pendulum swing and keeping score for a certain number of frames.
—Bowling with a regulation bowling ball of reasonable weight at regulation bowling pins in the gymnasium. It is suggested that 4 x 8 foot sheets of plywood or Masonite be placed down on the floor, end-to-end, to protect the floor finish.
—Bowl at local bowling lanes.

d. JUNIOR HIGH EDUCABLE STUDENTS These students should be able to:

—Bowl with the Cosom Gym Bowl set in the gym using one-step and multi-step approaches and keeping score.
—Bowl at local bowling lanes, as a member of a team, computing bowling averages and possibly holding a bowling tournament.

PADDLE AND BALL ACTIVITIES Racket sports require the use of a paddle or racket to propel an object, such as a tennis ball, badminton shuttlecock or table tennis ball. Through the use of commercial wood paddles or home-made wood paddles, striking skills can be taught.

1. SUGGESTED PADDLE AND BALL ACTIVITIES

a. TRANSITIONAL STUDENTS Although they may never progress to the point where a competitive racket sport can be played against an opponent, it seems appropriate that they be exposed to basic paddle and ball skills. Practice:

—Balancing a balloon, fleece ball or Whiffle ball on the paddle.
—Striking skills beginning with vertical bounces of the object into the air, progressing to hitting it against a wall and finally to a partner.
—Hitting badminton shuttlecocks with a paddle and then with a racket, if skill increases.

b. PRIMARY EDUCABLE STUDENTS Skill progression should approximate that provided to the transitional student. Introduce:

—Repeated, continuous hitting of the ball up into the air; against a wall or to a partner.
—Hitting the ball with a paddle over a low net to a partner who hits it back on first bounce.
—Hitting of a badminton shuttlecock with a wood paddle up into the air to oneself, against a wall or to a partner over a net.

c. INTERMEDIATE EDUCABLE STUDENTS This level student may be able to play the racket game using the appropriate implement and object required. If difficulties are observed, the instructor should go back to the sequence discussed previously for primary students.

d. JUNIOR HIGH EDUCABLE STUDENTS As with intermediate students, paddles and balls will be used only if individual students demonstrate difficulty in performing the striking skills appropriate to a particular game. The more refined and complex games, such as tennis, table tennis or paddle tennis should be offered to the students at this level; and scoring, infractions and strategies included.

PARACHUTE PLAY This recently popular activity can be enjoyed by the transitional students and primary and intermediate educable students. Junior high educable students usually are too mature to find much satisfaction in parachute play.

Activities using a parachute can be provided for development of physical fitness components and a wide variety of locomotor and non-locomotor movement patterns. Actions may be performed to the accompaniment of a tom-tom or recorded music.

Teamwork is taught through the introduction of various stunts which require a group effort if the stunt is to be successful. The reader is urged to contact:

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Walworth County Special School
Elkhorn, Wisconsin 53121

for a copy of his mimeographed unit entitled "Fun and Fitness Through Parachute Play." A variety of stunts, low organization games and exercises involving the use of a parachute are included. Recent books on physical education for elementary children may also contain descripions of parachute play activities.

A large parachute (30-feet or more in diameter) is ideal for conducting parachute play activities. As few as ten and as many as thirty children can be accommodated. Used or government surplus parachutes can be purchased for around thirty to fifty dollars. The nylon parachute with a small hole in its center is the best suited for parachute play activities. Colored dyes can be painted on the parachute to add eye-appeal.

COMMON TERMS USED IN PARACHUTE PLAY

—**Grip** Either an overhand (palms down) or an underhand (palms up) grip may be used. Students may grasp the parachute with both hands, using either grip or with one hand for circular movements.

—**Umbrella** Students lift the parachute up, extending their hands overhead. The parachute forms an umbrella shape.

—**Mushroom** The parachute is lifted to form an umbrella. Students walk toward the center of the parachute, causing it to mushroom higher many times almost to the ceiling.

—**Circus Tent** The parachute is lifted to the umbrella position and the students quickly pull the outer rim of the parachute down to the floor, kneeling on it. The air trapped inside forms a tent. A variation of this is to have the children raise the parachute to the umbrella position, step quickly inside and pull it down, outside them, forming a circus tent with all students inside.

1. SUGGESTED PARACHUTE PLAY ACTIVITIES

   a. TRANSITIONAL STUDENTS Transitional children may experience difficulty in performing parachute activities which involve movement patterns both locomotor and non-locomotor. Instead of stooping to grasp the parachute they often kneel, causing difficulty in standing up quickly and lifting the parachute. Include:

      —Exercise activities which involve bending, stooping, lifting and pulling.
      —Circular locomotor movements, involving patterns of walking, hopping, running, sliding and galloping.
      —Making ocean waves by shaking the parachute vigorously. Whiffle balls or beanbags may be tossed in the air by the parachute for added excitement.
      —Making the umbrella and mushroom shapes.
      —Making the circus tent with children outside; inside.
      —Playing Mole Tag — one child tries to find another beneath the parachute lying flat on the floor.

   b. PRIMARY EDUCABLE STUDENTS Conduct basic activities suggested for transitional pupils. Vary the activities to include:

      —More difficult and strenuous exercise activities.
      —Circular movements, holding the parachute taut like a merry-go-round, using more complex movement patterns or combinations. Musical accompaniment may be added.
      —Tug o'war type activities where children on one half of the parachute pull against the children gripping the other half, trying to pull the parachute in a given direction for a set distance.
      —Low organization games, such as number exchange, where children having the called number release their grip and run under the raised parachute to a new position.

   c. INTERMEDIATE EDUCABLE STUDENTS Complex combinations of locomotor and object manipulation patterns may be added, such as:

      —Circular movement while dribbling a ball.
      —Rhythmic activities performed while moving in circular fashion, such as the Bunny Hop, Schottische and others.

   d. JUNIOR HIGH EDUCABLE STUDENTS Parachute activities do not seem to be appropriate at this level for educable students.

WANDS Wands may be constructed by sawing bamboo fishing poles into approximately three foot lengths. Three-quarter inch wood dowels may be purchased or plastic pipe may be used. The number of wands available for use should equal the number of children in the class.

Many stunts, exercises, and combative type activities can be performed by manipulation of a wand. Since flexibility is a major requirement in wand activities girls may show greater proficiency than boys because, in general, girls have greater flexibility.

1. SUGGESTED WAND ACTIVITIES At the time of this writing, wand activities were used very little in the one-year old program of physical education for the mentally retarded students of Riverview School in Manitowoc, Wisconsin. The physical education program at the Walworth County Special School in Elkhorn is in its seventh year of existence and has reported little experience in using wand activities with its retarded students.

Since wand activities apparently have value in a good physical education program, it is hoped that the Riverview School and the Walworth County Special School will include them in their programs. The reader is urged to look through books on physical education for elementary children where wand activities may be described.

HOOP ACTIVITIES Wooden or plastic hoops may be purchased commercially or old bicycle tires may be substituted.

1. SUGGESTED HOOP ACTIVITIES

a. TRANSITIONAL STUDENTS These students appear to enjoy hoop activities, especially when colored Hula-Hoops or bike tires are used. Hoop activities for the Transitional Student might include:

—Locomotor movement patterns performed by jumping, leaping, hopping in and out of hoops laid flat on the floor.
—Twirling a hoop and catching it before it falls to the floor.
—Rolling a hoop while walking beside it; running.

b. PRIMARY EDUCABLE STUDENTS Hoop activities at this level might include:

—Combinations of locomotor skills performed while moving through, around and in and out of hoops.
—Using the hoop like a jump rope.
—Low organization games like Magic Carpets or exchange games requiring that children leave their hoop and seek another in which to stand, at a given signal.
—Using hoops as targets, bases or obstacles in other games.
—Hopping, jumping, leaping into and out of hoops laid flat on the floor in various patterns.

c. INTERMEDIATE EDUCABLE STUDENTS More difficult activities may be used at this level.

—Rolling hoops which are then used by another child as a target for a thrown ball.
—Rotating a hoop around various parts of the body, such as the waist, leg, arm, neck, etc.
—Rolling a hoop, giving it a reverse spin, resulting in its return to the child.
—Combatives, such as Two Man Tug O'War.

d. JUNIOR HIGH EDUCABLE STUDENTS At this level, hoops, bicycle tires, car tires or inner tubes may be used as hanging, rolling, lying or floating targets for a number of activities in which a ball is thrown or tossed for accuracy.

ROPE ACTIVITIES Activities involving the use of ropes — short or long — are excellent for developing the whole body. Jumping rope may increase muscular coordination and timing and rhythm of movement. Cardio-vascular endurance can be increased through prolonged rope jumping activity. Boxers and athletes often use rope jumping in their training programs to improve timing, footwork and to aid in controlling body weight.

This inexpensive and easily taught activity allows a maximum amount of physical activity within a minimum amount of time and space.

Rope jumping activities may be taught at almost any level, progressing into the more complex routines as the student increases his skill. Creativity is released in youngsters as they attempt to invent new steps and routines of their

own. The recitation of traditional rhymes and musical accompaniment may add to the enjoyment of rope jumping.

1. SUGGESTED ROPE ACTIVITIES

a. TRANSITIONAL STUDENTS Rope jumping may prove difficult to teach to the transitional student. Mobility problems and visual-motor competencies may hinder their learning. Include:

—Jumping or hopping over a stationary long rope, laid on the floor.
—Jumping or hopping over a slowly swinging long rope, swung by two children.
—Jump over a slow-turning long rope.
—Run through a slow-turning long rope.
—Turning a short rope over one's head and stepping over it; hopping over it; leaping over it.

b. PRIMARY EDUCABLE STUDENTS These students may be expected to learn rope jumping skills quite readily, especially the girls. Activities or progressions listed for transitional students may be reviewed and introduce:

—Running through turning long rope using the Back Door, Front Door.
—Jumping a turning long rope using a rebound jump, Hot Pepper jump while reciting popular rhymes.
—Jumping a short rope, turning it forward; backward, using a rebound or a Hot Pepper jump.
—Walking, running or galloping while turning a short rope forward.

c. INTERMEDIATE EDUCABLE STUDENTS Steps and routines may increase in difficulty. Include:

—Jumping a turning long rope with a partner or using three jumpers, varying the foot patterns.
—Jump a turning short rope inside a turning long rope.
—Jump two turning long ropes, such as Double Dutch, Double Irish or the Egg Beater routines.
—Jump turning short rope with a partner.
—Rope jumping to music.

d. JUNIOR HIGH EDUCABLE STUDENTS The girls at this age level may be interested in rope jumping but it is doubtful that the boys will be.

GYM SCOOTER ACTIVITIES Gym scooters may be purchased commercially in a variety of shapes — circular, square and triangular. Their cost ranges from six dollars and up. They can be constructed in the school shop for approximately three to four dollars, using a 12-inch square piece of ¾-inch plywood and four plate casters (rubber).

Many games of low organization can be played using gym scooters. Activities involving the fundamental movement patterns of pushing, pulling, carrying and others can be adapted to use with scooters.

1. SUGGESTED GYM SCOOTER ACTIVITIES

a. TRANSITIONAL STUDENTS Scooter activities for these students should have an emphasis on fun and enjoyment in participation. Include:

—Sitting on the scooter, pulling with the feet; pushing.
—Sitting on the scooter, pulling with hands and feet; pushing with feet and hands.
—Kneeling on the scooter, pulling with the hands; pushing.

b. PRIMARY EDUCABLE STUDENTS Individual activities may be increased in complexity and partner activities introduced.

—Lying on stomach with head and feet off the floor. Movement may be accomplished by pulling with the hands; pushing.
—Lying on scooter with backs of shoulders and pushing with the feet.
—Partner or small group activities with performers seated on scooters and in contact with another child in some manner.
—Low organization games, adapted for use of scooters, such as tag games.

c. INTERMEDIATE EDUCABLE STUDENTS Scooter activities may be used to liven up a period of monotonous practice. Activities might include:

—Modification of simple team games to include scooters as the means for movement, such as playing gym hockey on scooters.
—Relay races involving the various scooter activities.
—Combatives, requiring the unseating of opponents.

d. JUNIOR HIGH EDUCABLE STUDENTS Although most junior high students are quite mature, they still enjoy getting down and playing on the floor. Activities may include:

—Stunts performed as imitations of a leader.
—Black Bottom, a variation of soccer, played in the gym using a dodge ball while seated on scooters.

RHYTHMIC MANIPULATIVE ACTIVITIES Although the Tinikling Dance or Bamboo Hop is a rhythmic activity, it is being presented here since it involves the manipulation of bamboo poles. Lemme Sticks, an Indian game, also involves manipulation of sticks but is not covered here. Tinikling is a Filipino folk dance depicting the movements of the long-legged "Tinikling" bird. The legend goes that the bird prances around two natives seated on the ground, who manipulate two long bamboo poles in an effort to trap the bird's legs between the poles.

Two students sit or kneel on the floor opposite each other on either end of long bamboo poles (8-feet long), holding the end of one pole in each hand. The poles are resting on 2 x 4's to accommodate hand manipulation of the poles. The two pole-men watch each other's hands and simultaneously strike the poles together once, sliding the poles out to the ends of the 2 x 4 blocks where the poles strike the block twice. A steady rhythm must be maintained throughout and the poles should be parallel to each other. The rhythm is together-down-down, together-down-down and so on.

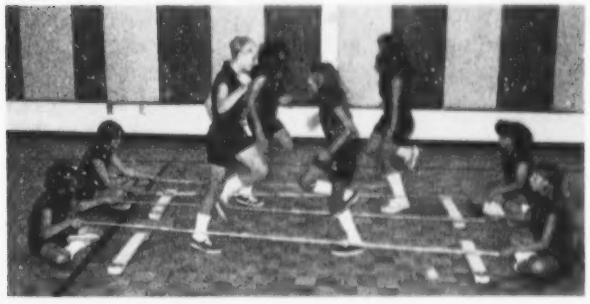
In the meantime the dancer performs various combinations of steps, stepping between the separated poles two steps and once outside the closed poles. It may be performed to the accompaniment of a chant, a tom-tom or music.

1. SUGGESTED ACTIVITIES

   a. TRANSITIONAL STUDENTS AND PRIMARY EDUCABLE STUDENTS Experience in attempting to present the Bamboo Hop to these two groups of retarded children has prompted us to recommend that it not be attempted.

   b. INTERMEDIATE EDUCABLE STUDENTS Teaching of the Tinikling Dance should be separated into two parts: the pole manipulation and the dance steps.

      —Teach basic dance steps with poles stationary and apart from each other or open.
      —Double hop: hop on same foot twice inside the poles; hop once outside poles on other foot in an in-in-out rhythm pattern.
      —Straddle hop or jumping jack: hop twice on both feet inside the poles; once on both feet outside in an out-in-in rhythm pattern.
      —Side Step: side-step right foot inside the poles, close with left and step out on right foot, lifting left. Return, reversing foot step sequence. Rhythm pattern is right-together-step, left-together-step, etc.
      —Teach pole manipulation without a dancer.
      —Using a rhythm pattern of together-down-down repeated.
      —Combine pole movement with dancer without music.
      —Add music to complete rhythmic activity.



   c. JUNIOR HIGH EDUCABLE STUDENTS Arrangement of the sets can be varied and partner dances can be introduced.

      —Arrange poles in single set with two children moving the poles and one or two dancers.
      —Arrange sets of poles into a line formation with dancers stepping through the moving poles.
      —Arrange two sets of poles perpendicular across each other with dancers stepping inside and outside of poles, moving in a circular fashion.
      —Dancers may hold hands in pairs and step in and out of moving poles.

Seasonal Sports Activities

Assuming that the mentally retarded children, for whom the physical education program was designed, have attained some degree of proficiency in the fundamental movement patterns object manipulation skills and activities, and have an adequate knowledge regarding the team concept and competitiveness, the next logical step in the sequence of the program would be seasonal sports activities.

Seasonal sports are highly organized traditional games or activities. They are the sports which are played by amateur and professional athletes. They can be a vital part of the physical education program for the mentally retarded children, particularly in the upper intermediate and junior high educable levels.

Readiness for the specific locomotor, non-locomotor and object manipulation skills so essential to seasonal sports play can and should be taught in the earlier school years. Primary and intermediate students can derive much satisfaction from learning to use the equipment of these games and in playing related or lead-up games that use the same skills and some of the rules and strategies of the true seasonal sport.

Particularly fundamental to seasonal sports play is the team concept which is usually developed at the later primary and intermediate levels through games of low organization, including relays. Here the importance of the individual team member's skill and cooperation to the success of the total team's efforts are learned.

Types of Seasonal Sports Activities

SKILL DRILLS While rote memory drills are discouraged in the special education classroom, it appears that repetitious practice of isolated skills or a combination of skills essential to the particular sport is important. Skill drills may include self-testing activities, relays and play patterns designed to learn and practice desired skills. In skill drills, the excitement and competitive atmosphere of the seasonal sport are missing.

INTRODUCTORY TEAM GAMES Introduced at approximately the upper primary level, these games require general skills, knowledges and attitudes, rather than specific skills and formations of any one seasonal team sport. They are used to develop the team concept and the importance of teamwork or cooperative effort. Competition between teams is involved but less teamwork is required for a team's success than in modified team games since they offer competition between teams and individual efforts on the part of the performers to influence the team's success.

LEAD-UP GAMES In these activities, the specific skills of a particular seasonal sport are used in competition between groups of players. Some of the strategies, formations and rules of the official game are also utilized. Modifications may be made to adjust to the skills of the class and the space and equipment available.

INDIVIDUAL AND DUAL SPORTS Involving competition between two players (singles) or four players (doubles) these sports offer recreational and lifetime enjoyment to children and adults. Skills esential to these sports should be taught and practiced as a group and applied to play on the playground and at home.

General Strategies for Seasonal Sports

1. BALL HANDLING STRATEGIES

a. Quick, sharp, short passes are less prone to be intercepted by an opponent than long, slow moving throws.
b. Passes or throws to a moving teammate should lead him.
c. The importance of propelling the ball to an unguarded area or maneuvering oneself to an unguarded area to receive a throw, pass or kick should be emphasized.
d. The catch or trap should be smoothly executed with the performer ready for his next move, whether it be running, dribbling, passing to a teammate or shooting for a goal.

2. OFFENSIVE STRATEGIES

a. Teach the importance of charging ground balls or moving to meet a pass, throw or kick.
b. Screening or blocking of an opponent to keep him away from the ball or a teammate in possession of the ball is essential to offensive play.
c. Offensive attack, the maneuvering of the ball into an ideal scoring position, is essential to good play in seasonal sports.
d. Stress following-up after attempted goals to regain possession of the ball for another attempt.
e. Demonstrate feinting or deceptive moves designed to fake-out or baffle an opponent.

3. DEFENSIVE STRATEGIES

a. When guarding an opponent in possession of the ball, stress interception of passes, blocking of goal attempts and ability to quickly move with the opponent's moves.
b. If the opponent does not have the ball, teach positioning oneself between the opponent and the goal, avoiding bodily contact, while attempting to prevent the opponent from receiving the ball.

1. SUGGESTED SEASONAL SPORTS ACTIVITIES

a. TRANSITIONAL STUDENTS Although these students will probably never play a highly organized seasonal sport, basic skills and concepts may be taught at this level. If the transitional students cannot play as a group, it may be wise to integrate the more capable students with educable students to enable them to experience the playing of seasonal sports as a member of a team. For transitional students include:

—Uncomplicated modified forms of soccer, perhaps using a cage ball with an entire wall of the gym as the goal. Object of the game would be to kick the cageball to score by hitting an unguarded portion of the wall.

—Modified softball games. Kickball can be taught to transitional students successfully. The concept of running bases, in order, is perhaps the most difficult part of the teaching.

—Softball, having the batter hit the ball from a batting tee and running the bases. Commercial "soft" softballs are ideal. Stress dropping the bat after hitting the ball, rather than throwing the bat. As skill progresses, the teacher may attempt pitching the softball to the batter.

—Recreational activities, such as basket shooting games, playing catch with oneself, tetherball or badminton.

—Participation in a track meet, with the teacher selecting the track and field events where competency is exhibited.

b. PRIMARY EDUCABLE STUDENTS Primary age students will not be able to participate in highly organized seasonal sports activities. The learning of skills, knowledges and attitudes for successful participation in seasonal sports at a later age is more important than actual playing of seasonal sports. Include:

—Low organization games which involve individual, dual and group participation. A small amount of competitiveness may add satisfaction and motivate these youngsters to improve their competencies.

—Stressing of fair play, by admitting when tagged or hit, not cheating, respect for equipment and the rights of others and observation of rules, no matter how simple they may be.

—Modified seasonal sports skill drills to develop skills peculiar to a particular sport.

—Recreational individual and dual activities, played on the playground or in the neighborhood.

—Track and field meets with competition between students based upon ability grouping. The teacher should select events for individual students, based upon his observations of abilities.

c. INTERMEDIATE EDUCABLE STUDENTS When students have reached this level, many will have favorite athletic teams on the high school, college and professional level and will idolize sports figures. Girls and boys will be separated for competitive reasons but some coeducational activities may be conducted. Include:

—Basketball skill drills which teach the various types of passes, catching, dribbling, guarding areas or an opponent, offensive team play and shooting for goals utilizing a variety of shots.

—Football skill development including drills which practice passing, punting, kicking, catching, running and tackling in Flag Football by snatching a flag from the ball carrier's belt.

—Practice of soccer skills such as kicking with the instep of the foot; side of the foot; trapping using feet, legs, knees or body; dribbling, passing, heading, protecting a goal or guarding an area, cooperative team play and observation of basic rules of soccer.

—Softball skill development including throwing, pitching, catching, batting, fielding, retiring batters, batting order and understanding of the basic rules of softball in regard to outs, fair or foul balls, strikes and balls and positions terminology and responsibilities.

—Volleyball lead-up, including serving, volleying over a net and a knowledge of volleyball rules regarding scoring, sideout, position rotation and common terminology.

—Individual and dual sports which apply previously learned locomotor and object manipulation skills in traditional games and sports activities. These should be played in small groups and have carry over value for out of class play. Activities may include rope jumping, hopscotch, croquet, badminton, tetherball and Four Square.

—Track meets with the children selecting events.

d. JUNIOR HIGH EDUCABLE STUDENTS Students at this level should demonstrate the ability to play the various seasonal sports with proficiency of skills, knowledge and attitudes necessary for successful play. They should be able to play:

—Soccer or the related game of Speedball demonsfrating guarding and blocking of an opponent, body control to avoid foul, offensive scoring strategies, duties and responsibilities of the various positions and understanding of rules scoring, fouls and penalties.

—Football type games showing skill in understanding of offensive blocking, evasive ball carrying, defensive planning and basic rules of Flag or Touch Football, such as downs and scoring.

—Basketball games to develop pivoting, dribbling, passing and shooting; defensive and offensive play and an understanding of the rules.

—Volleyball demonstrating ability to position the body where the ball will come down, serving, volleying and understanding team rotation, scoring and rule infractions.

—Softball games, using various size balls, showing agility, defensive play and rules.

—Individual and dual sports engaged in on the playground and in the neighborhood.

—Track meets with pupil selection of track and field events.

Stunts and Tumbling Activities

Stunts involve the solving of tasks or problems through the application of fundamental movement patterns. Most stunts are of the self-testing variety which challenges the student to perform the particular stunt in the demonstrated manner. Dual or partner and group stunts call for cooperative effort.

Tumbling activities usually involve the performance of actions on a protective surface, such as a mat to protect the performer from injury and to bolster confidence and courage. Although similar to stunts, tumbling activities involve a greater mastery of body skills and execution.

Types of Stunts

EXPLORATORY STUNTS Activities where children attempt to imitate familiar things or discover new ways to move their bodies. They may be performed while stationary or while moving.

INDIVIDUAL STUNTS These require agility, flexibility, balance and strength. The teacher describes and may demonstrate the stunt and the children attempt to duplicate it.

PARTNER STUNTS Cooperative effort on the part of two children is required for performing partner stunts. Students should be paired comparably by size, weight and ability.

ROLLS Fundamental to all tumbling and many gymnastic activities, rolls are taught on a mat. Rolls may include forward and backward rolls or a combination of the two.

BALANCING STUNTS These individual stunts require the maintenance of balance while on a base of support other than the legs or feet.

COMBATIVES These stunts require strength, agility and balance to overcome or succeed against an opponent. Combatives always have an element of competition whether between two opponents or two opposing groups.

PYRAMIDS Individual, dual or group balancing in a symmetrical design are called pyramids. The highest participant is usually in the center of the group.

1. SUGGESTED STUNTS AND TUMBLING ACTIVITIES
   a. TRANSITIONAL STUDENTS Simple stunts and tumbling activities should be selected to meet the abilities of the transitional students. Safety must be stressed. Include:

   —Animal mimetics with familiar animal walks or movements being imitated.
   —Self-testing stunts such as the Stork Stand, Tight Rope Walker, Jumping Jack and Coffee Grinder.
   —Basic tumbling rolls, such as the Log, Side and Egg Rolls.
   —Lead-up activities to balancing stunts, including the Tripod and Frog Stand.
   —Simple partner combatives, such as Tug O'War.

   b. PRIMARY EDUCABLE STUDENTS Increase the complexity of the stunts and tumbling activities at the Transitional level. Include:

   —Competitive races using various animal mimetics.
   —Forward and backward rolls; combinations and variations.
   —Individual balancing stunts.
   —Dual and group combatives, such as Arm Wrestling, Cock Fight, King on the Mat.

   c. INTERMEDIATE EDUCABLE STUDENTS Stunts and tumbling activities used at earlier levels should be reviewed and introduce:

   —Stunts to develop strength, agility, balance, endurance.
   —Individual head and hand balances; partner balances; group balancing stunts, such as pyramids.
   —More complex rolls on mats, including combinations and variations of forward and backward rolls; double rolls; dive and roll; and Three Man Shuffle.
   —Cartwheel.
   —Combatives between two students or groups to determine a winner.

   d. JUNIOR HIGH EDUCABLE STUDENTS Grace and smoothness of execution should be emphasized, stunts should be of the competitive nature and used to develop various areas of the body. Include:

   —Conditioning stunts to develop arms and shoulders, legs and trunk.
   —Difficult individual, dual and group stunts.
   —Various types of headstands, handstands and walking on the hands.
   —Flips, head and hand springs.

Apparatus Activities

A good program would not be complete without various types of apparatus which offer children opportunities to climb, hang, swing, travel and balance. Courage and confidence can be developed through the maneuvering of one's body on, through, under and over apparatus. Apparatus activities, particularly those which require suspension of the body off the ground, develop strength of the hands, arms, shoulders, upper back and most other muscles essential to good posture.

Each piece of apparatus provides some particular height, width or shape to which the child must adjust his movement patterns. A wide variety of apparatus equipment is available for purchase commercially or the inventive teacher may make use of such common objects as concrete sewer pipes, logs, benches, etc., to substitute for commercial apparatus.

To protect children from bodily injury, usually place mats beneath indoor apparatus. Outdoor apparatus should be installed with a soft, yielding surface below them. Spotting techniques to insure safe performance by a classmate on apparatus must be instilled in the children. The children need instruction in **how to mount** or get onto the apparatus, **what to do** once on the apparatus and **how to dismount** or get off or down from it.

1. SUGGESTED APPARATUS ACTIVITIES

   a. TRANSITIONAL STUDENTS Familiarize the transitional students with proper and safe use of the apparatus found on the playground or in the gymnasium. Include:

      —Climbing in and out; up and down on stall bars, jungle gyms or other climbing frames.
      —Landing safely in a balanced position from a low hanging position or following a jump down from a low elevated surface.
      —Hanging from a horizontal bar, swinging and then safely dismounting.
      —Balancing while walking a line, a board or a low balance beam.
      —Simple movements or stunts on gymnastic apparatus, such as vaulting low benches or basic drops on the trampoline.

   b. PRIMARY EDUCABLE STUDENTS Emphasize safe play. Teach basic actions or movements on playground and gymnastic apparatus, including:

      —Climbing to the top and descending from vertical ladders, jungle gyms, etc.
      —Climbing up a vertical rope or pole to a safe height and descending.
      —Hanging from a horizontal bar by the hands; knees. Swinging and landing.
      —Walking a balance beam forward, backward, sideward.
      —Stunts on gymnastic apparatus, such as Skin the Cat on the horizontal bar; hand traveling on horizontal ladders; basic drops on the trampoline.

   c. INTERMEDIATE EDUCABLE STUDENTS Difficulty and complexity of activities may be increased to include:

      —Horizontal bar activities, such as chinning, leg lifts, bent arm hang for time, etc.
      —Hand traveling across a horizontal ladder or parallel bars.
      —Climbing and descending from a vertical rope, using hands and feet; hands alone.
      —Vaulting over a low rail, bench, box or side horse.
      —Balance beam activities using a variety of locomotor movement patterns.
      —Advanced stunts and movements on gymnastic apparatus.

   d. JUNIOR HIGH EDUCABLE STUDENTS Attention will be focused on gymnastic apparatus activities, stressing form and graceful execution of the desired actions.

      —Rope climbing for distance and time, using feet and hands; hands alone.
      —Vaulting variations over a side horse or Swedish vaulting box.
      —Parallel bar activities, including hand travels, mounts and dismounts, Skin the Cat, Bird Nest and others.
      —Horizontal bar activities, including mounts, dismounts, swinging, turning, etc.
      —Advanced trampoline stunts, such as rope jumping, partner rebound jumping and somersaults.

Aquatic Activities

Here aquatic activities for the mentally retarded will focus upon the main objective of any aquatics program — that of teaching the individual to survive or maintain himself in water. The mentally retarded person, whether a child or an adult, has the same desires to participate in recreational water activities as his non-retarded peers. Boating, fishing, swimming and other activities on, in or near water are enjoyable forms of recreational activity, which can result in fun and enjoyment or in tragedy for the non-swimmer or the poor swimmer. Thus, swimming programs must teach the non-swimmer to swim and the poor swimmer to swim better.

The program of aquatic activities at the Riverview School in Manitowoc, Wisconsin, during its first year of operation — 1970-71 — was concerned mainly with teaching its mentally retarded children to swim. Water safety instruction on what to do if another person is drowning was largely limited to the use of ring buoys and poles. Swimming instruction was limited to the American National Red Cross Beginner and Advanced Beginner Courses. It is expected that in the years to come, all Red Cross Courses, including Junior and Senior Life Saving will be conducted. All following discussion will be presented with the above in mind.

Swimming is an enjoyable and healthful form of exercise and recreation which can contribute to both muscular and organic fitness. Through the mastery of swimming skills, the feeling of accomplishment is realized. Overcoming fear of water may help in overcoming other fears. Success fosters self-confidence in oneself. Perceptual-motor competencies may be improved through the learning of swimming skills. This improvement may carry over into other areas of activity, including the classroom. Participation in the various level progressions in the Beginner and Advanced Beginner Courses will foster perseverance, seeing a task through to the end.

Objectives of the Aquatics Program

To acclimate the children to water through the presentation of planned, sequencial experiences adapted to each particular child's needs and abilities.

To improve performances and develop the desire to be safe on, in and around water.

To present the opportunity for the child to gain in self-confidence so that he will be able to enjoy aquatic activities.

To teach the mentally retarded non-swimmer to swim or to swim better.

Teaching Suggestions

The following suggestions have been taken from the literature and from experiences in teaching the mentally retarded to swim.

The teacher should not let his expectations interfere with the setting of realistic goals for each pupil.

The students must be ready to learn. This may be exhibited by listening to directions and showing an interest in the activity.

Educable mentally retarded children should be taught in small groups, with one instructor for every four to five children. For the transitional students, this ratio may have to be reduced to a one to one teacher/pupil ratio.

Tact and patience must be exercised by the instructor to get wary students into the water.

Photograph courtesy of the Manitowoc Herald Times.

Teaching swimming fundamentals need not be tedious; enjoyable approaches to learning can be developed. Visual demonstration is far more valuable than verbal directions. It is important that the instructor work in the water with the students. Invent ways or techniques of teaching the children to put their faces in water, breath control, etc. Encouragement and assurance should be given where appropriate. Make use of flotation devices where appropriate and give some attention to a fun period or free time in each lesson. Familiarization with the childrens' medical records can uncover epileptics, heart conditions, etc.

Teaching Aids

FLOTATION DEVICES Often, it is necessary in the interest of more effective teaching and learning to make use of flotation devices to enable students to experience the sensation of buoyancy or to maintain correct body positions in the water. These may include water wings, rubber or plastic rings, life preservers or homemade devices. They should be used sparingly, only when appropriate and only under supervision of the instructor.

FACE MASKS OR GOGGLES These are used primarily with students who are hesitant to place their faces in the water or to enable the student to see the underwater movements of a skill.

KICKBOARDS These are used to develop the various kicks necessary to swimming strokes. Leg power can be increased through prolonged use of them.

POLES, BOARDS OR ROPES Such equipment is invaluable in enabling the child to experience the sensation of moving his body through the water by pulling himself along while supported by the device.

RECREATIONAL DEVICES Although recreational in nature, inflated balls or animals, diving rings and weighted toys may be used to motivate children to place their faces in the water. They may be especially valuable in teaching the Transitional students.

8MM MOTION PICTURES OR VIDEO TAPE Students will learn faster if they can **see** what they are doing wrong, rather than **hearing** about their mistakes. While motion pictures will accomplish this, a time factor is involved since the film must be developed. The Riverview School in Manitowoc and the Walworth County Special School in Elkhorn have both made successful use of portable video tape equipment. This enables the instructor or some other school personnel to tape the swimming movements of the performer and immediately replay the action, pointing out errors and mistakes.

Sample Swimming Lesson

The instructor must follow a well planned instructional session. No one plan will be successful with all classes, which may vary in number, age and abilities. The Red Cross recommends the following general form, which may be altered to meet various situations:

REVIEW OF PREVIOUS LESSON The instructor may discuss the skills or knowledges learned in the previous lesson or ask the student or students to demonstrate them. This is done to establish the relationship of the learned skill to the one to be introduced.

INTRODUCTION OF NEW SKILL The instructor gives a clear, concise explanation or demonstration of the skill to be introduced.

WARM-UP DRILL A brief calisthentic or land drill will allow the students to loosen-up and settle them down before beginning the lesson.

PRACTICE PERIOD

1. Breathing activities, such as bobbing up and down in the water while breathing rhythmically, will improve breath control.
2. Quick, brief review of the previously learned skills.
3. Teaching the new skill, using the recommended progressions.

TAPERING OFF The practice period should be ended to allow time for teacher comments or free play time, which may involve water stunts, games or informal competition.

REVIEW DAY'S LESSON Condense comments to emphasize key points of the day's lesson which the children should remember. Give a brief preview of what is to be introduced in the next lesson.

Beginner Course

The teaching of swimming to the non-swimmer may prove to be one of the most difficult swimming teaching tasks, especially when working with transitional students. The age level at which to use the Beginner's Course will vary, according to swimming ability. It would be unwise and impossible to attempt to parallel the Red Cross swimming progressions with the chronological or mental age groupings or levels found in the school. Thus, the Beginner Course is taught to non-swimmers, whatever their age.

The Red Cross Beginner Course involves introducing the children to water and then leading them through successive steps in the mastery of the simple skills involved in getting them afloat. All elements of good teaching — enthusiasm, patience, persuasiveness, assurance and teaching skill — must be used. The fears and inhibitions of the children must be replaced with the joy and happiness of achievement.

BEGINNER COURSE OBJECTIVE The Red Cross Instructor's Manual lists the objective of the Beginner Course as: " . . . to equip the individual with basic water safety skills and knowledges in order to make him reasonably safe while in, on or about water."

SAFETY SUGGESTIONS

1. Explain and show the students the limits of the area in the pool within which they will be swimming. This must be done before they enter the water. Line markers aid in defining the area.
2. Safety rules should be explained and also posted on a chart in the pool area. Justify the reason for rules, such as no pushing, running, shoving or ducking of others.
3. Explain reason for buddy system and have a lifeguard on the pool deck to provide adequate safety.

LEARNING SEQUENCE The reader is asked to refer to the American National Red Cross Instructor's Manual, **Swimming and Water Safety Courses** for detailed information regarding the progressions for the Beginner's Course. Space limits the discussion here to main headings.

1. Physical and mental adjustment to the water
   a. entering—wading and submerging
   b. mouth breathing
   c. breath control—under water
   d. bobbing and rhythmic breathing
   e. kick on front and back

2. Buoyancy and body position
   a. prone float
   b. back float
   c. rhythmic breathing
   d. kicking on front and back

3. Propulsion and coordinated stroking
   a. prone glide
   b. prone glide with kick
   c. back glide
   d. back glide with kick
   e. arm stroke on front
   f. crawl stroke
   g. arm stroke on back
   h. combined stroke on back

4. Entries
   a. leveling off from vertical position and swimming
   b. jumping into shallow water
   c. jumping into deep water
   d. diving head first

5. Personal safety
   a. changing directions
   b. turning over
   c. releasing cramps
   d. assisting a non-swimmer to his feet
   e. treading water
   f. reaching and extension assists
   g. mouth-to-mouth resuscitation

TESTING OF BEGINNER SKILLS To measure the progress of the students and their capabilities, a series of standards of achievement are given on the **Beginner Skill Sheet** which is traditionally used and is available at all Red Cross chapters (Form 1382). Upon completion of all skills presented in the Beginner Course, a certificate entitled **Beginner in Swimming** (Certificate 1386) is presented.

Advanced Beginner Course

Students who have passed the Beginner Course have a variety of safety skills and are capable of swimming on both front and back. Few transitional students will progress beyond the Beginner Course, but most educable students should progress in similar fashion to non-retarded children.

ADVANCED BEGINNER COURSE OBJECTIVES The **Instructor's Manual — Swimming and Water Safety Courses** lists the following objectives for the Advanced Beginner's Course:

1. "To increase the watermanship of the individual by adding to the skills learned in the Beginner Course."
2. "To afford the individual an opportunity to experience continued success in a reasonable period of time and thus motivate him to continue his water safety training."
3. "To prepare the student for additional water safety training by introducing him to a series of skills designed to improve his stamina and basic coordination."

LEARNING SEQUENCE Instructors have great flexibility as to sequence and should make up their lesson plans in a session-to-session progressive arrangement from the following course skills and information:

1. breath control
   a. bobbing in deep water
   b. rhythmic breathing
2. survival floating
3. treading water and changing positions
4. elementary backstroke
5. crawl stroke
6. diving and underwater swimming
7. use of a life jacket
8. safety and rescue techniques

TESTING OF ADVANCED BEGINNER SKILLS Individual skills, as listed on the **Advanced Beginner Skill Sheet** (Form 5319) are checked off as they are mastered and a certificate issued to those students who indicate a mastery of all required skills.

Enrichment Activities

Enrichment activities are presented here as special events or portions of the physical education program which are in addition to the regular program of daily classes. They may be termed frosting on the cake and they include intramural, extramural or interscholastics and intraschool track meets.

The Riverview School in Manitowoc does not offer interscholastic athletic competition. Instead, a comprehensive program of intramurals, social enrichment activities and annual track meets are offered to its mentally retarded students — both the Transitional students and the Educable students. It is the premise of this publication that should an instructor have a student or students whom he feels has the ability and attitude to compete on the interscholastic level, that student should be encouraged to try out for an interscholastic team.

The Walworth County Special School in Elkhorn, has attempted to field an interscholastic basketball team at the junior high level, playing non-retarded teams from nearby junior high schools. After the first three years of competition, their record was 2-28, which has changed their philosophy somewhat, to encourage the better athletes to seek competition at their respective community school as a member of a team composed mainly of non-retarded students.

Following are discussions of the various types of enrichment activities which can prove to be a valuable addition to any program of physical education and recreation, whether for the mentally retarded or for the non-retarded.

Intramural Program

Recreation and social discipline are the core of the intramural program at Riverview School. The emphasis is to expose the mentally handicapped youngster to various activities and experiences that have carry-over values or lifetime sports, so that he can be proficient in leisure activities. In many cases, youngsters in educable classes come from home environments that fail to recognize the need for worthwhile recreation and social interaction.

Activities provided on an intramural basis include:

1. Fall — boys: flag football; girls: soccer and speedball
2. Winter I (six weeks) — boys and girls: basketball
3. Winter II (five weeks) — co-ed: volleyball
4. Winter III — co-ed: recreational games (bowling, badminton, shuffelboard, box hockey, ping pong)
5. Spring — co-ed and by sex: softball, track and field

Tournaments are conducted in some of the activities with prizes awarded to first place winners. These tournaments have been the culminating events for the various activities as the thrill of competing becomes reality for the mentally retarded boys and girls.

The value of this program is for the retardate who demonstrates his skill to participate in a wide variety of leisure activities when given the opportunity and encouragement.

Social Enrichment Program

The social enrichment program is scheduled during the regular physical education classes on Friday afternoons. All intermediate, junior high and secondary students participate in the program. The purpose of the program is to provide youngsters an opportunity to select and participate in activities that they would not normally have an opportunity for during the regular school curriculum. This program is more socially oriented than the intramural program and offers a wider selection of activities which are designed to meet the needs of all youngsters no matter how limited their mental or physical abilities may be.

The program is further designed to provide youngsters at Riverview School an opportunity to develop skills in activities that would make them proficient to participate in similar activities with their normal peers. All youngsters participate in the bowling program which is conducted off campus at Meadow Lanes in Manitowoc and at Rudy's Lanes in Two Rivers.

The staff members with teaching assignments during this block of time are assigned to instruct and supervise the activities. The enthusiasm shown by the entire staff is a big asset to the program and it has allowed them an opportunity to observe the children in situations outside of the classroom environment.

ACTIVITIES AND SEASON

FALL
1. Flag football (boys)
2. Soccer (boys)
3. Speedball (girls)
4. Social dance (co-ed)
5. Hobbies/games (co-ed)
6. Chorus (girls)
7. Chorus (boys)
8. Piano (individual lessons)
9. Art and crafts (co-ed)
10. Weight training (boys)
11. Industrial arts (girls)
12. Home arts (boys)
13. Girl Scouts

WINTER I
1. Recreational swimming (co-ed)
2. Basketball (boys and girls)
3. Hobbies/games (co-ed)
4. Indoor soccer/hockey
5. Chorus (boys)
6. Chorus (girls)
7. Piano (individual lessons)
8. Art and crafts (co-ed)
9. Girl Scouts
10. Weight training (boys)
11. Home arts (boys)
12. Industrial arts (girls)
13. Social dances (co-ed)

WINTER II
1. Recreational swimming
2. Basketball (boys and girls)
3. Volleyball (boys and girls)
4. Social dance (co-ed)
5. Hobbies/games (co-ed)
6. Indoor soccer/hockey
7. Chorus (boys)
8. Chorus (girls)
9. Piano (individual lessons)
10. Art and crafts (co-ed)
11. Weight training (boys)
12. Home arts (boys)
13. Industrial arts (girls)
14. Roller skating (co-ed)
15. Girl Scouts

WINTER III
1. Recreational swimming (co-ed)
2. Volleyball (boys and girls, co-ed)
3. Girl Scouts
4. Social dances (co-ed)
5. Hobbies/games (co-ed)
6. Indoor soccer/hockey
7. Chorus (boys)
8. Chorus (girls)
9. Piano (individual lessons)
10. Art and crafts (co-ed)
11. Weight training (boys)
12. Home arts (boys)
13. Industrial arts (girls)
14. Roller skating (co-ed)
15. Bowling (co-ed)
16. Badminton (boys and girls)

SPRING
1. Softball (boys and girls)
2. Kickball (co-ed)
3. Track and field (boys and girls)
4. Social dances (co-ed)
5. Hobbies/games (co-ed)
6. Chorus (boys)
7. Chorus (girls)
8. Piano (individual lessons)
9. Art and crafts (co-ed)
10. Home arts (boys)
11. Industrial arts (girls)
12. Roller skating (co-ed)
13. Girl Scouts

Tournaments will be conducted in some of the activities with prizes awarded to first place winners. These tournaments have been the culminating events for the various activities as the thrill of competing becomes reality for the mentally retarded boys and girls.

The value of this program is for the retardate, who demonstrates his skill to participate in a wide variety of leisure activities when given the opportunity and encouragement.

All School Track Meet

The retardate should be provided opportunities to formally compete in athletic events unless medical reasons do not permit such participation. Track is a sport in which the retardate can compete successfully and gain a degree of competence and accomplishment. The sport is individually oriented in nature, however, there are provisions for team participation with the inclusion of relay teams and homeroom teams.

All educable and transitional youngsters participate except for medical reasons and each participates in two events, with additional events to be selected depending on the level of competition.

Individual ribbons (first three places) are awarded in each event with a homeroom trophy awarded to the winning team at each level of competition.

Events are modified according to the level of physical development of the students in each age group and include the following:

Running Events	Field Events
Lower Primary:	
25 yard dash	Baseball throw
100 yard run	Long jump
60 yard hurdles (12")	
Upper Primary:	
50 yard dash	Softball throw
100 yard run	Running long jump
220 yard run	High jump
120 yard hurdles (18")	
220 yard relay	
Intermediate:	
50 yard dash	Shot put (boys)
100 yard dash	Softball throw (girls)
220 yard run	Discus (boys)
440 yard run	High jump
120 yard hurdles (24")	Running long jump
440 yard relay	
Junior High:	
50 yard dash	Discus (boys)
100 yard run	Shot put (boys and girls)
220 yard run	High jump
440 yard run	Running long jump
880 yard run	Triple jump
120 yard hurdles (24")	
880 yard relay	

Primary and Intermediate I participate with Lower Primary, while Intermediate II transitional participate with Upper Primary.

Junior High and Secondary transitional:

25 yard dash	Softball throw
220 yard run	Long jump
220 yard relay	

As the physical education program develops, track meets will be scheduled with elementary schools in the immediate area. However, youngsters that possess the necessary physical, emotional and social skills will be encouraged to participate with their regular junior high school track and/or cross country teams.

Punt, Pass and Kick Contests

For many years, the Walworth County Special School has provided each Fall, a Punt, Pass and Kick Contest for the boys in the school, identical to the contest sponsored nation-wide by The Ford Motor Company. For the first three years that it was held, Ford donated all necessary equipment and trophies to the school to conduct the contest.

Currently, ribbons are given out to the first five places in each age group, for each of the three events. Riverview School plans to conduct a similar contest for its male student population in the years ahead.

Special Olympics

Originated in 1968, by the Joseph P. Kennedy, Jr. Foundation, the Special Olympics have been held on the local, state and regional level annually, with the International Special Olympics being held biannually. Events include test items from the **Special Fitness Test,** a modified version of the American Association for Health, Physical Education and Recreation's **Youth Fitness Test** and various other track and field events and swimming. This publication contends that Special Olympic competition is and should be designed for the Transitional student enrolled in public, private or parochial schools or in institutions. The contention further is that the schools should be able to provide competitive events for their educable mentally retarded students without the flair, pomp and circumstance of the Special Olympics.

Part IV

Appendices

This section includes two suggested class period timetables, an annotated bibliography of useful physical education books and simple teaching units written in the format of the Wisconsin **Teachers' Handbook for Implementation of the State Curriculum for Educable Mentally Retarded.**

Suggested Class Period Timetables

Transitional and Primary Educable Students

Transitional and primary educable students of the Riverview School receive thirty minutes of physical education daily. Although the format and timetable of the period may change from day to day, a typical class period for these students might appear like the following:

5 minutes—Opening formation and warm-up period. When the class reports to the gymnasium, playground or play area, the instructor may have them line up for roll call, if required by the school. Rather than calling off names, it is better to assign numbers to individual students and have the line number off.

Warm-up activities might include calisthentics or exercises or games and activities of low organization to loosen up joints and muscles and to set the tempo for the class period.

5 minutes—Introductory activity. This may include a discussion and a demonstration of the skill, skills or activity to be covered in the day's lesson. This time may also be spent in reviewing the previous day's lesson, either through verbal discussion or a brief performance of the skill, skills or activity learned.

15 minutes—Instructional or practice period. Practice of the skill or skills introduced occurs during this time slot. Students may practice the skill or skills individually, in pairs or in small groups or squads. The instructor can move from child to child, from pair to pair or from group to group, offering suggestions and reinforcement to the students.

5 minutes—Concluding the period. Often, this portion of the class period may be omitted due to a lengthened practice period. If the class is successfully engaged in an activity, it may be wise to allow it to run up to the end of the period.

Intermediate and Junior High Educable Students

Boys and girls at the Riverview School in these two age groups receive forty-five minutes of physical education daily. They are required to dress appropriately for the activity periods and shower following the period. In the upper-intermediate and junior high levels, boys and girls are separated for instructional purposes in the gymnasium, on the playground or by activity. Traditional physical education uniforms are required dress. A typical class period for boys and girls will parallel each other in length and timetable and might appear like the following:

5 minutes—Dressing. Students report to their respective locker room where they remove street clothes and change into their physical education attire.

5 minutes—Opening activity. This may involve lining up for roll call and warm-up activities, such as calisthentics, combatives or low organization games.

5 minutes—Introductory activity. A brief review of the previous day's instructional lesson or activity may be conducted. New skills are designated, explained and demonstrated or new activities explained. This portion of the period may be omitted if the class has mastered the previous day's lesson.

22 minutes—Instructional or activity period. Length of this portion may vary according to difficulty of the skill or skills to be mastered or the length of a game or activity to be conducted. Practice of skills may be individual, dual or in squads, with the instructor circulating among the class members to offer instruction, suggestions or reinforcement.

8 minutes—Shower and dress. With practice, students may be able to shower and dress in less time, allowing more time for activity.

Annotated Bibliography

American Association for Health, Physical Education and Recreation. **The Best of Challenge.** Washington, D.C.: The Association, 1971. 224 pp.

The publication contains selected articles from the first five volumes of **Challenge**, a bi-monthly newsletter dealing with physical education, recreation, camping, outdoor education and related areas for the mentally retarded.

This compilation of selected articles tells what is going on in the field of physical education and recreation for the retarded. It is designed for use by college courses as a text. It is a valuable resource for the individual concerned with the retarded.

_____ **A Guide for Programs in Recreation and Physical Education for the Mentally Retarded.** Washington, D.C.: The Association, 1968. 48 pp.

This guide is intended to stimulate thought and to provide ideas and suggestions of what should be included in a comprehensive program of recreation and physical education for the mentally retarded. It discusses objectives, activity areas, evaluation of progress, facilities, equipment, medical examinations, public relations and other factors which must be considered when planning a program.

_____ **Knowledge and Understanding in Physical Education.** Washington, D.C.: The Association, 1969. 124 pp.

A manual designed to meet an apparent need of teachers for clearcut statements of the facts and understandings underlying the exercises and activities in the physical education program. It attempts to present the **how** and **why** of what is done. An attempt has been made to provide a basis on which students may be evaluated through standardized tests.

_____ **Physical Activities for the Mentally Retarded — Ideas for Instruction.** Washington, D.C.: The Association, 1968. 138 pp.

This publication is designed for use by special educators and physical educators and other personnel concerned with education of the mentally retarded. The contents deal with activities which promote development of fundamental motor skills which are basic to most specific sports. The book is divided into four levels: (1) Fundamental movement patterns and skills; (2) Low organization activities; (3) Adapted and lead-up activities and (4) Games, sports and higher organized activities.

_____ **Rhythmic Activities — Grades K-6.** Washington, D.C.: The Association, 1964. 59 pp.

Designed to offer encouragement to all classroom teachers to attempt more in rhythmic activities. Booklet presents ideas for a variety of rhythmic experiences, points out approaches to movement education and outlines evaluation techniques.

_____ and National Recreation and Park Association. **Physical Education and Recreation for Handicapped Children.** (Proceedings of a Study Conference on Research and Demonstration Needs). Washington, D.C.: Bureau of Education for the Handicapped, 1969. 81 pp.

The primary purpose of the Conference was to pinpoint immediate and future needs for research and demonstration projects in physical education and recreation with handicapped children. Topics presented at the Conference included viewpoints on the status of physical education and recreation for the various handicapping conditions, including mental retardation, emotionally disturbed and physically, visually and hearing impaired handicapped.

American National Red Cross. **Swimming and Water Safety Courses — Instructor's Manual.** Washington, D.C.: American National Red Cross, 1968. 97 pp.

This accepted instructor's manual outlines the organization, administration and evaluation of a swimming program. The instructor's responsibilities are discussed, along with teaching aids, class organization and management and methods of teaching swimming. Classifications of swimmers discussed include Beginner, Advanced Beginner, Intermediate Swimmer and Advanced Swimmer.

American National Red Cross. **Swimming for the Handicapped — Instructor's Manual.** Washington, D.C.: American National Red Cross, 1960. 67 pp.

The manual deals with a program of swimming instruction for those individuals in our population who suffer from some type of handicapping condition. Some conditions can be corrected or improved only by medicine or surgery, while others may respond to a rehabilitative program of swimming instruction. Values, aims and objectives and teaching suggestions are presented for each handicap.

Carlson, Bernice Wells and David R. Gingland. **Play Activities for the Retarded Child.** New York: Abingdon Press, 1961. 224 pp.

One of the pioneer books published regarding play activities for the retarded, this book's greatest value may be to the classroom teacher, rather than the physical educator.

Recreational type activities follow a discussion on the needs for play of retarded children. Informal and dramatic play, finger-play, table games, arts and crafts, music and other game-type activities round out the book's coverage of play activities.

Chaney, Clara M. and Newell C. Kephart. **Motoric Aids to Perceptual Training.** Columbus, Ohio: Charles E. Merrill Publishing Company, 1968. 138 pp.

Book presents the basic motor and perceptual activities for training children with learning disorders, including the brain injured and retarded. These initial training activities help the child learn those generalized motor responses which contribute to development of his skills in the perceptual and conceptual areas.

The first section covers the theoretical base, the second deals with problems of evaluation of behavior and the final secton describes actual training activities and programs.

Council for Exceptional Children and American Association for Health, Physical Education and Recreation. **Recreation and Physical Activity for the Mentally Retarded.** Washington, D.C.: The Association, 1966. 87 pp.

The book is designed to give insight to school and community personnel who may be working with mentally retarded children in physical education and recreation activities. Emphasis is on recreation, the mentally retarded, objectives and desired outcomes of programs, organization of programs and suggested activities.

Council For National Cooperation in Aquatics and American Association for Health, Physical Education and Recreation. **A Practical Guide for Teaching the Mentally Retarded to Swim.** Washington, D.C.: American Association for Health, Physical Education and Recreation, 1969. 152 pp.

Swimming as part of the educational program for the mentally retarded is justified and practical suggestions for instruction are given in this book. It is the result of a composite of the thinking and experience of many individuals who have taught the mentally retarded to swim.

The book emphasizes that no single approach will guarantee success in teaching the retarded to swim. The **Guide** is designed to help instructors formulate good methods, progressions and techniques which reach the individuals and classes concerned.

Cratty, Bryant J. **Trampoline Activities for Atypical Children.** Palo Alto, Calif.: Peek Publications, 1969. 54 pp.

Activities on a trampoline are discussed, such as selection, safety, orientation and specific teaching techniques. Check lists are provided to evaluate skills taught. Atypical children include the retarded, children with perceptual-motor difficulties, the hyper-active and other children who experience movement problems.

_____ **Developmental Sequences of Perceptual-Motor Tasks.** Freeport, L.I.: Educational Activities, Inc., 1967.

The text presents selected developmental sequences of perceptual-motor activities which may be helpful in the education of mentally retarded and neurologically handicapped and other professional personnel concerned with the learning problems of atypical children. The material presented may also be of value to parents of children with learning difficulties.

_____ **Motor Activity and the Education of Retardates.** Philadelphia: Lea E. Febiger, 1969. 233 pp.

Dr. Cratty has attempted to demonstrate just how movement may aid the retarded child to function better with his family, in the classroom and with his peers. Through a review of related literature, Cratty has attempted to justify motor activities being included in school programs for children with learning difficulties. The book is written for the research scholar, the curriculum specialist, the school psychologist, the special educator, the physical educator and the parents.

_____ **Movement Behavior and Motor Learning.** Philadelphia: Lea and Febiger, 1967. 367 pp.

This book attempts to bring together data relevant to the understanding of human movement with particular reference to learning. The material presented deals with perceptual factors, then discusses the variables which influence the performer and finally the various components of movement behavior and motoric functioning caused by the resultant perceptual and organismic factors.

_____ and Sister Margaret Mary Martin. **Perceptual-Motor Efficiency in Children.** Philadelphia: Lea and Febiger, 1969. 223 pp.

Cratty and Martin present a brief but excellent review of current literature dealing with the relationship of body movement to learning and intelligence. Both parents and professionals should profit from the material presented.

A program for the development of perceptual-motor efficiency based on sound principles of child development is

presented. Motivating children to learn is stressed throughout.

Dauer, Victor P. **Dynamic Physical Education for Elementary School Children.** (4th Ed.) Minneapolis: Burgess Publishing Company, 1971. 504 pp.

The author, in revising the third edition, has attempted to include newer elements and approaches with older concepts and directions of value into a functional program of physical education. The book represents a rational, proportional emphasis on skill development, fitness elements, basic movement and perceptual-motor concepts.

Division for Handicapped Children, Mentally Handicapped Section. **A Persisting Life Needs Approach to a Curriculum for the Educable Mentally Retarded.** Madison, Wis.: Wisconsin Department of Public Instruction, 1970. 280 pp.

Designed for use as a model curriculum for special educators in the state of Wisconsin, this publication contains sections on objectives for teaching the educable mentally retarded, learning approach to behavior development of the retarded and persisting life situations confronted by retardates.

Division for Handicapped Children, Mentally Handicapped Section. **Teachers' Handbook for Implementation of the State Curriculum for Educable Mentally Retarded.** Madison, Wis.: Wisconsin Department of Public Instruction, 1970.

This publication is intended to aid special education teachers with curricular provisions for mentally retarded children. It is designed to familiarize special educators with the **State Curriculum for Educable Mentally Retarded — A Persisting Life Needs Approach** and to guide the teacher in writing educational instructional units employing the behavioral objective approach.

Ebersol, Mary Lou, Newel C. Kephart and James B. Ebersole. **Steps to Achievement for the Slow Learner.** Columbus, Ohio: Charles E. Merrill Publishing Company, 1968. 196 pp.

This text focuses on the early childhood training of the child with brain dysfunction. The book leads the child through ascending steps of motor learning, then perceptual learning, then conceptual learning. It emphasizes how this may be achieved — through specific, practical, positive activities to guide the handicapped child. It contains both theory and curriculum material.

Frankel, Max G., F. William Happ and Maurice P. Smith. **Functional Teaching of the Mentally Retarded.** Springfield, Ill.: Charles C. Thomas, Publisher, 1969. 241 pp.

This book deals with an integrated, total approach to teaching trainable mentally retarded children. Although the material is slanted toward special educators, all personnel working with retarded children may benefit. Traditional theories and concepts are discussed, as are the teaching of motor activities, perceptual and perceptual-motor activities.

Franklin, C. C. and Wm. H. Freeburg. **Diversified Games and Activities of Low Organization for Mentally Retarded Children.** Carbondale, Ill.: Southern Illinois University, N.D. 70 pp.

The publication is a collection of games and activities developed for the Institute program series for Leadership Training of day camp directors for mentally retarded children held at Little Grassy Facilities, Southern Illinois University. Contents include teaching principles, games and contests, child growth and development characteristcs and needs, dramatization, songs, water activities and notes on day camping for the retarded.

Ginglend, David R. and Winifred E. Stiles. **Music Activities for Retarded Children — A Handbook for Teachers and Parents.** New York: Abingdon Press, 1965. 140 pp.

A book designed to assist the music teacher, classroom teacher, recreation or volunteer leader to initiate a developmental beginning music program for retarded children. Includes selections to appeal to children with mental ages from three to eight years. Music included in the book is suitable for Trainable and Educable mentally retarded children up to about twelve years of age.

Glass, Henry. **Exploring Movement.** Freeport, L.I., N.Y.: Educational Activities, Inc. 1966. 67 pp.

This book deals exclusively with the exploration of words, objects, materials and common play implements. Rhythmic activities with a movement exploration approach are discussed.

Godfrey, Barbara B. and Newell C. Kephart. **Movement Patterns and Motor Education.** New York: Appleton-Century-Crofts, 1969. 310 pp.

The book is an outgrowth of experience and collaboration of the authors — a physical educator and a clinical psychologist-special educator — in development, operation and investigation of a program of movement pattern education and motor therapy. It evolved from clinical and educational assessment and instruction of children with learning problems.

The book contains discussions of the basic movement patterns, checklists and evaluative techniques, as well as practical teaching methods, examples of programs and examples of specific techniques and activities.

Hayden, Frank J. **Physical Fitness for the Mentally Retarded,** Toronto, Ontario, Canada: Metropolitan Toronto Association for Retarded Children, 1964. 48 pp.

This book is a report of a study conducted in north Metropolitan Toronto in the early 1960's. Physical fitness is discussed in regard to testing, developing, organizing programs, fitness activities and aquatics.

Illinois Curriculum Program. **Physical Education in Elementary Schools.** Springfield, Illinois: Office of the Superintendent of Public Instruction, 1965. 232 pp.

Designed to serve as a resource guide which traces the role of the elementary school in facilitating physical development and fitness. Essential experiences children need at given ages are divided into seven sections which describe the skill, individual or group activities to develop the skill and specific games. Although originally intended for use with normal children, its format and skill progressions may prove valuable in working with the retarded.

Mager, Robert F. **Preparing Instructional Objectives.** Palo Alto, Calif.: Fearon Publications, Inc., 1962. 61 pp.

Mager advocates the preparation of educational instructional units with respect to these questions: (1) What are we trying to teach? (2) How will we know when we have taught it? (3) What works best to teach what we want to teach? His text discusses the development of behavioral objectives for all types of educational units, whether for academic or non-academic areas of instruction.

Mathews, Donald K. **Measurement in Physical Education.** (3rd Ed.). Philadelphia: W. B. Saunders Company, 1968. 388 pp.

Written for use as a text for the undergraduate student taking his first course in tests and measurements in physical education, this book should be on the desk of every physical educator. It is not research-oriented; instead, it explains measurement materials with an emphasis on test administration and application of the results to the program. Only essential statistics are discussed in relation to the evaluation and analysis of data for the latter.

Mosston, Muska. **Developmental Movement.** Columbus, Ohio: Charles E. Merrill Books Inc., 1965. 317 pp.

The text is profusely illustrated with stick-figure drawings performing a variety of movement concepts designed to achieve total body development. New ideas in movement and in the use of innovative, inexpensive equipment are presented for reference of the physical educator or anyone interested in physical development.

Nagel, Charles and Fredricka Moore. **Skill Development Through Games and Rhythmic Activities.** Palo Alto, Calif.: The National Press, 1966. 310 pp.

A book designed for use as a text for undergraduate programs in elementary physical education. Especially useful to teachers in directing the progression of skill development and relating them to suitable activities for various age groups. Profusely illustrated with line drawings of correct mechanics of fundamental ball, locomotor, non-locomotor and dance skills. Based on teaching basic skills by including rhythmic games and dances.

National Association for Retarded Children. **Swimming for the Mentally Retarded.** New York: The Association, 1959. 17 pp.

This manual was prepared in cooperation with the American National Red Cross and presents material pertinent to the teaching of swimming to the mentally retarded, including organizing a program, values, objectives, skills to be taught and teaching suggestions. Sample admission applications, health records and progress check lists are presented, also.

Pennsylvania Department of Education. **Challenge to Change — Program Guidelines in Physical Education for the Mentally Retarded.** Harrisburg, Pa.: The Department, 1970. 127 pp.

This publication is intended for use as a state guide for physical education with the retarded in Pennsylvania. It has merit and value for all states and all levels of education. The physical educator can gain valuable insights into teaching the retarded. College students and special educators will find value in reading this book.

Sections discuss mental retardation, physical education, motor development and progressively designed programs in physical education for the retarded. Checklists are presented for use in evaluating physical and motor development of mentally retarded children.

Porter, Lorena. **Movement Education for Children.** Washington, D.C.: American Association of Elementary-Kindergarten-Nursery Educators, 1969.
This pamphlet describes movement education programs used to help the child understand and control the many ways in which his body may move. The author contends that this emphasis on what the body does and where and how it moves can help children work and play better in many other situations.

Regan, Paul R. **Physical Education for the Handicapped Through a Recreation Program of Remedial Sports and Social Activities.** Memphis, Tenn.: Jno. R. Kinnie Printing Co., 1966. 45 pp.

The publication interprets the author's experiences in working with handicapped people in recreation programs. It is slanted toward parents, teachers and other personnel working with the handicapped. Disabilities include physical, emotional, social and intellectual. Various seasonal sports, recreational activities and suggestions for working with the handicapped are presented.

Richards, Barbara J. "Teaching the Mentally Retarded to Swim." Elkhorn, Wis.: Walworth County Special School, 1970. Mimeographed (Speech presented at the Mid-West Convention of the American Association for Health, Physical Education and Recreation, April 1970). (Also reprinted in a condensed version in **Challenge,** Vol. 6, No. 4, March-April 1971.)

Four accepted approaches are discussed in teaching the retarded to swim. They include: movement exploration; station instruction; one-on-one instruction and perceptual-motor activities. Planning, organization, instruction, recording and evaluative techniques for swimming are discussed.

Robins, Ferris and Jennett Robins. **Educational Rhythmics for Mentally and Physically Handicapped Children.** New York: Association Press, 1968. 239 pp.

Originally printed in Zurich, Switzerland, this book describes in detail the remedial method developed by the authors for use in the rehabilitation of mentally and physically handicapped children. Their method is intended to appeal to the whole person, both body and mind. All natural means of communication between child and teacher are used to influence the child. Music, words, colors, pictures and movement, in harmonious combinations, serve as tools for progressive therapy. The aim is to coordinate body and mind in pleasant animated rhythimc movement. The authors conduct workshops throughout the world and a ten-record album is available to supplement the book. It is distributed in the United States by:

Russell Records, Inc.
1403 Callens Road
Ventura, California 93003

Schurr, Evelyn L. **Movement Experiences for Children: Curriculum and Methods for Elementary School Physical Education.** New York: Appleton-Century-Crofts, 1967. 569 pp.

This is intended as a comprehensive guide to the planning and implementation of a developmental physical education program for children from Kindergarten through eighth grade. Part I is an overview of physical education, the child and curriculum. Part II deals with the teaching process. Part III gives information concerning the foundations of all movement skills. Part IV includes activities to develop and reinforce skills concepts and understandings.

Sheboygan County School for Special Education. **A Guide to Physical Education for the Mentally Retarded.** Sheboygan, Wis.: Sheboygan County, 1970. 112 pp.

This publication was the result of a six-week summer session, conducted at the Sheboygan County School to give practical student teaching experience to intern teachers in physical education, during the summer of 1970. The Sheboygan County program was Phase I of a multi-phase Title VI project on physical education and recreation for the mentally retarded. Phase II was a year-long program at the Riverview School in Manitowoc, Wisconsin.

Southern Regional Education Board Recreation Committee. **Recreation for the Mentally Retarded — A Handbook for Ward Personnel.** Atlanta, Georgia: The Board, 1964. 199 pp.

This handbook was designed primarily for use by the ward personnel in residential facilities for the mentally retarded. It includes a justification of recreation in a program for the mentally retarded. Sections include: active games, music and rhythms, quiet table games, arts and crafts and homemade games and equipment.

The nominal cost of the handbook ($3.00) and the material presented — primarily toward the abilities of the Transitional Mentally Retarded Child—make it a valuable addition to the physical educator's library, whether he is teaching in a residential setting or a public school.

Van Hagen, Winifred, Genevie Dexter and Jesse Feiring Williams. **Physical Education in the Elementary School.** Sacramento: California State Department of Education, 1951. 1008 pp.

This is perhaps one of the most comprehensive, informative books ever published on the subject of physical education for the elementary school. It was originally printed to serve as the California State Guide for elementary school physical education.

Although it is out-dated, that is, does not contain modern concepts, such as perceptual-motor skills, it is still a very valuable book to the physical educator. Characteristics of good elementary school physical education programs as well as activities by grade levels, one through eight, are included.

Vannier, Maryhelen and Mildred Foster. **Teaching Physical Education in Elementary Schools** (3rd ed.) Philadelphia: W. B. Saunders Company, 1963. 429 pp.

This book is designed for the physical educator and the classroom teacher. The why, the who, the where and the how of physical education for elementary children are discussed. The book is profusely illustrated with pictures and line drawings which show how skills and activities should be taught. Although not specifically slanted toward the retarded child, it is a valuable resource for the physical educator.

Wakefield, Eleanor Ely. **Folk Dancing in America.** New York: J. Lowell Pratt and Company, 1966. 221 pp.

This book was written primarily for the teacher who is interested in the evolution of American folk dance and who intends to make others aware. A brief history of folk dance, the place of folk dance in education, teaching hints and progressions and detailed descriptions of selected dances are presented.

Although a knowledge and acceptance of our dancing heritage may not be within the comprehension of the mentally retarded, the book is still a valuable tool in teaching folk dance as a **means** to locomotor and non-locomotor development. Folk dance will not be taught to the retarded as an **end** in itself.

Wickstrom, Ralph L. **Fundamental Motor Patterns.** Philadelphia: Lea and Febiger, 1970. 178 pp.

The book is slanted toward those persons interested in the improvement of human movement. It covers motor patterns which are the basis for a line of continuity from the simple to the complex. The six most commonly used basic skills are presented and discussed in depth. They are: running, jumping, throwing, catching and striking. Pictorial data is used to illustrate movement patterns.

Wisconsin Department of Public Instruction. **A Guide To Curriculum Building in Physical Education — Elementary Schools.** Madison, Wis.: The Department, 1963. 116 pp.

This bulletin was prepared to provide guidance in both program development and selection of teaching procedures for more effective teaching. The guide emphasizes helping children develop proficiency in the use of their bodies. Movement is depicted as a means of learning, not an end in itself.

Sample Teaching Units

Pool Orientation, PLS No. 6 Learning to Live Safely, for All Levels p. 86.

Locomotor Movements to a Drum Beat, PLS No. 5 Learning to Keep Healthy, for All Levels p. 87.

Beginning Rope Jumping, PLS No. 5 Learning to Keep Healthy, for Primary TMR Level p. 89.

Ball Exploration (Volley and Serve), PLS No. 10 Learning Wise Use of Leisure Time, for Primary Level p. 92.

Introduction to Soccer, PLS No. 10 Learning Wise Use of Leisure Time, for Intermediate and Junior High Levels p. 93.

Beginning Volleyball, PLS No. 10 Learning Wise Use of Leisure Time, for Intermediate and Junior High Levels p. 96.

PLS: No. 6 Learning to Live Safely — LEVEL: All Levels

OBJECTIVE: C. Begins to Learn About Safety in Recreation

AIM: Avoid Dangerous Actions

CENTER OF INTEREST UNIT: Aquatics

SUBUNIT: Pool Orientation

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
Students in a swimming pool situation will be able to:	Teacher discusses with students the following:	**Physical Education Acquatics K-12.** The University of New York State, State Education Department Curriculum Development Center, 1966.	
1. Follow directions when they may or may not swim.	1. No swimming when: a. cuts and wounds b. colds c. menstruating		
2. Form correct habits of personal care.	2. Personal care: a. care of personal clothing and locker use b. putting swimsuit on c. toilet use d. showers — before swimming and after e. nose care f. drying — body and hair g. eye care for chlorine		
3. Abide by pool rules.	3. Rules: a. meaning of whistle use b. no running c. respecting others d. jumping, diving and personal safety		
4. Differentiate pool terms.	4. Terms: a. deck b. side of pool c. ramp d. ladder e. rope f. markings around pool g. chlorine h. deep and shallow end		
5. Put equipment away carefully and keep pool deck clean.	5. At the end of the period, all equipment is put away.	Refer to previous resources or American Red Cross Manual for explanation of rescue techniques.	
6. Demonstrate basic rescue techniques.	6. The students practice: a. pole extension b. arm extension c. leg extension d. ring buoy throw		

PLS: No. 5 Learning to Keep Healthy — LEVEL: All Levels

OBJECTIVE: A. Develops Ability to Practice Good Health Measures

AIM: Our Body

CENTER OF INTEREST UNIT: Rhythms — Lead-up to Dance

SUBUNIT: Locomotor Movements to a Drum Beat

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
Given the proper demonstration and necessary instruction, the student will be able to first walk, then run rhythmically to the beat of the drum.	The teacher will encourage the students to listen carefully to the drum beat and move accordingly. 1. Move one foot with each beat. 2. Move in a normal walking step. 3. Move faster as the tempo increases — walk eventually turns into a run. Variations: Establish a pattern in which a hard beat means to walk low; a soft beat — walk high. Intensity and mood can be established by allowing the students to explore their own ideas. It is found that sometimes the student will need help in this area. When this happens problems such as "Can you walk like an elephant?" or "Can you walk softly?" may be suggested. This problem solving method can be used with the following locomotor movements also. Parachute play can also be added for added incentive.	Tom-tom drum	A pass-fail test can be given for each locomotor movement performed to the drum beat along a 30 foot straight line.
Given the proper demonstration and instruction, the student will be able to jump rhythmically to the beat of the drum.	1. Jump with both feet on each drum beat. 2. Increase tempo to promote quick short jumps. Variation: Change drum beat patterns to establish direction, mood or intensity of the jump. Jump rope to the drum beat.		
Given the proper demonstration and instruction, the student will be able to skip and gallop to the beat of a drum.	1. The step-hop pattern of the skip gallop is established on the drum by a long-short; (hard-soft) beat. 2. Unsure students should skip along with a more skillful skipper. 3. Unsure students should gallop along with a more skillful student. 4. The gallop is a forward skip with the same foot leading at all times. Variation: Same as above		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
Given the proper demonstration and instruction, the student will be able to leap to the beat of a drum.	1. Run forward to the short-soft beats of the drum. 2. When the beat becomes long-hard, the student should leap forward with as much distance as possible. 3. When students can leap with ease and distance, make an imaginary river which they must leap over. See who gets wet.		
Given the proper demonstration and necessary instruction, the student will be able to slide.	1. Move sideways. 2. Move one foot with each drum beat. 3. As tempo increases, emphasize a slide-hop movement. This movement requires the same beat as that for the skip. Variation: Same as above.		
Upon acquiring the basic locomotor movements with sufficient practice, the student should be able to execute the appropriate locomotor movement to a variety of drum beats.	When students become familiar with these fun locomotor movements and their rhythmical beats, change the drum beat several times, making it necessary for the students to keep changing their locomotor movements.		

PLS: No. 5 Learning to Keep Healthy

LEVEL: Primary — TMR

OBJECTIVE: A. Begins to Understand and Practice Good Physical Health

AIM: Good Posture

CENTER OF INTEREST UNIT: Movement Experiences — Fundamental Locomotor Skills

SUBUNIT: Rope Jumping — Beginning

Behavioral Objective	*Activities*	*Annotated Resource Materials*	*Evaluation*
Given the proper demonstration and practice time, the student will be able to perform a stationary rope jump.	The teacher gives a jump rope to each student and puts them in a scattered formation. 1. Place rope on floor and stand along side of it so that one side is close to the rope. 2. Springing off both feet, jump over the rope, landing on the other side on both feet. 3. Speed process up. 4. Caution students to jump just high enough to clear the rope. Variation: perform jumping movement to the beat of a drum or to a musical selection.	Educational Research Council of America Physical Education Program. **Program Guide for Grades K-6**, by Gabriel J. DeSantis and Lester V. Smith. (ERCAPEP)	
Given the proper demonstration and practice time and acquisition of a stationary rope jump, the student will be able to perform a stationary rope rebound jump.	1. Place rope on floor and stand along side of it so that one side is close to the rope. 2. Springing off both feet, jump over the rope, landing on the other side on both feet. 3. After landing in part 2, perform a short jump (rebound) to gain balance and jump back over the rope. Continue this action. Variation: Same as above		
Given the proper demonstration and practice time and acquisition of a rebound jump, the student will be able to perform a rope jump and a rebound jump to a swaying rope.	1. Scatter students in groups of three. 2. Two students hold the rope while the third jumps. 3. The rope is held so that the midpoint touches the floor. 4. Have one student stand along one side of the rope. 5. Students holding rope cause it to sway back and forth. 6. As the rope comes toward the jumper, he then springs off both feet, allowing the rope to pass beneath him and lands on both feet. Action is repeated until the student tires. 7. Have students change positions.		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	8. When students can perform a single jump to the swaying rope, add the rebound jump and continue as above. Variation: Same as above		
Given the proper demonstration and practice time and acquisition of a rebound jump, the student will be able to perform a short and long rope swing.	1. Give each student a short rope and scatter them. 2. Double the rope and hold it in the right hand. 3. Swing the rope forward in a counter clockwise circle so that the end strikes the ground. 4. Repeat turning the rope backwards. 5. Repeat both actions using left hand. 6. Scatter in groups of two. 7. After deciding direction, the students swing the rope in a full circle so that it strikes the floor on each turn. 8. Swing rope in opposite direction. Variation: Same as above		
Given the proper demonstration and practice time, the student will be able to run through a swinging long rope.	1. Scattered groups of three. 2. Have two students swing the long rope away from the third student, who stands along side of the rope, facing it. 3. Timing the swing of the rope, the third student runs under the arch of the rope, beginning his move as the rope strikes the ground. He completes his movement through the rope before it strikes the ground again. 4. He returns to position by walking around the rope. 5. Have students exchange position periodically. Variation: Have two students swing the rope, while the whole class runs through.		
Given the proper demonstration and practice time, the student will be able to perform a rope jump and rebound jump to a swinging long rope.	1. Scatter in groups of three. 2. Two students swing rope so it passes over the jumper's head and down towards his feet. 3. The jumper springs into the air and allows the rope to pass beneath his feet. Continue action.		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	4. Have students exchange positions. 5. Add a rebound jump between each jump over the rope. Variation: 1. Have more than one student jumping at a time. 2. Jump to a drum beat or musical selection. 3. Have student run in, jump once and run out again. Increase number of jumps each time. If the student misses, he takes the place of one of the rope turners.		
Given the proper demonstration and practice time, the student will be able to perform a rope jump and rebound jump to a short swinging rope.	1. One jump rope for each student in a scattered formation. 2. Hold rope with loop behind ankles. 3. Swing rope over head and step over rope with one foot (lead foot). 4. Transfer weight to lead foot and lift rear foot as rope swings under. 5. Return weight to rear foot and continue the action. 6. Repeat same action leading with opposite foot. 7. After the students can step over the swinging rope, add the jump, so that they jump over rope as it passes under their feet. Continue action. 8. Add rebound jump. Variation: To drum beat and music — endurance jump; 1 min. in length.		
These variations can only be done by the accomplished rope jumper and should not be emphasized in a beginning rope jump unit. However, there will always be a few who can go on and a teacher should have added skills for such students.	When the student can successfully rebound jump with the short rope, add other skills as 1. hopping with both, right then left foot 2. leap 3. stride 4. Bleking skip 5. Straddle skip 6. Cross skip	see ERCAPEP Program Guide Index card RRS-12 RRS-13 RRS-14 RRS-15 RRS-16 RRS-17	

PLS: No. 10 Learning Wise Use of Leisure Time — LEVEL: Primary

OBJECTIVE: A. Begins to Learn About Selection and Location of Appropriate Activities

AIM: At School

CENTER OF INTEREST UNIT: Recreation and Sport Skills (Volleyball)

SUBUNIT: Ball Exploration (Volley and Serve)

Behavioral Objective	*Activities*	*Annotated Resource Materials*	*Evaluation*
Given the problem and time for guided problem solving exploration, the student can consecutively volley the ball 3-5 times against the wall.	The teacher presents the students with the following problems in progression: "Can you throw and catch the ball against the wall?" Students should stand on a line approximately 2 feet from the wall. Students should be encouraged to use both the overhand and underhand throw. "How many times in a row can you throw and catch the ball against the wall?" "Using your fingers and the palms of your hands can you bat the ball against the wall?" Students should be encouraged to bat the ball up to the line 5 ft. from the floor. 1. The palms face forward and the elbows are up somewhat. 2. The student should maneuver to a position directly under the ball, keeping eyes on the ball.	**A Guide to Movement Exploration** — Hackett and Jensen Publication.	Given 30 seconds, count the number of times the student can throw and catch the ball against the wall. The student should be able to throw the ball up to a line 5 ft. from the floor, while standing 2 ft. from the wall. Given 30 seconds, the student stands on the line and volleys the ball up to the 5 foot line. During that time the student should be able to volley the ball 3-5 times in a row without dropping it.
Given the problem and time for guided problem solving exploration, the student can serve the ball to a target approximately 20 ft. away.	"Can you hold the ball in one hand while hitting it out of your hand with the other?" The teacher encourages the use of the following techniques: 1. Hold the ball straight out in front of you in your left hand. 2. Make a fist with your hand (right) and with an underhand motion hit the ball out of your left hand. 3. Now reverse the holding hand with the fisted one. Encourage the use of the most effective method — right or left. "Can you hit the ball out of your hand in a straight line?" "How far can you hit the ball?" At this point the teacher explains that this procedure of hitting the ball is called **serving** the ball in volleyball.		The students stand on a line 20 ft. from the wall and serve the ball to the wall. Five trials are given, recording the number of successful serves.

Behavioral Objective	*Activities*	*Annotated Resource Materials*	*Evaluation*
	The teacher observes individual differences and problems throughout each of the presented situations and techniques and works individually with the student to help correct it.		

PLS: No. 10 Learning Wise Use of Leisure Time *LEVEL:* Intermediate & Junior High

OBJECTIVE: A. Understands the Selection and Location of Appropriate Activities

AIM: At School

CENTER OF INTEREST UNIT: Recreational and Sport Skills

SUBUNIT: Introduction to Soccer

Behavioral Objective	*Activities*	*Annotated Resource Materials*	*Evaluation*
Given the proper demonstration and practice time, the student will be able to dribble the soccer ball approximately 30 yards without losing control.	The teacher will demonstrate the technique of dribbling the ball using the inner foot and the outer foot. Practice can be: with a partner relay around an obstacle such as cones	**Sports Activities for Girls and Women.** Barnes Fox, Loeffler and Scott. Appleton-Century Crofts Publisher, New York. pp. 274-5. Soccer Sport Skills Chart, AAHPER. Educational Resource Council of America. Physical Education Program Index Cards for K-6. DeSantis, Gabriel and Lester Smith. Charles E. Merrill Publishing Comp., 1969.	The pupil stands behind a starting line 15 yds. from a turning line. On signal, he dribbles the ball from the starting line around an Indian club on the turning line and back. He must pass the ball straight ahead within 2 yds. of the finish line. This prevents long kicks. Stop the watch as the ball passes over the finish line. Record the score.
Given the proper demonstration and practice time, the student will be able to pass the soccer ball to a partner.	The teacher will demonstrate passing the soccer ball using 1. inside of foot 2. outside of foot 3. heel (back pass) Practice can be: with a partner against a wall in a circle relay	Refer to **Sports Activities for Girls and Women.** pp. 275.	

Behavioral Objective	*Activities*	*Annotated Resource Materials*	*Evaluation*
Given the acquisition of the skill of dribbling and passing, the student will be able to combine the two in a running situation.	1. Student has a partner. 2. One has the ball and dribbles it forward in a running manner. 3. The partner runs along side approximately 3 yards away, ready to receive the pass. 4. The student dribbling the ball passes it by one of the previous passing techniques to his partner who continues dribbling it. The student may dribble down the gym and pass to the wall also.		
Given the proper demonstration and practice time, the student will be able to trap the ball when kicked to him.	The teacher will demonstrate trapping the ball by: sole of foot knee trap Practice: with partner in relay team in a circle	Refer to **Sports Activities for Girls and Women** for descriptions of skills.	The pupil stands on a line 10 yds. from the kicker. The kicker passes the ball to the student who in turn traps it by the sole then the knee trap method — 2 trials for each method, pass or fail. For other skill tests refer to ERCAPEP index cards ESS-1-6 under soccer tests.
Given the basic rules of soccer, students are able to score, recognize fouls and identify positions in a modified soccer game.	The teacher explains the scoring in modified soccer — point is awarded each goal. After a goal is scored the team scored against shall kick off. The positions are as follows: (1) 1 goalie for each team (2) Forward line (front line — they try to score, offense) (3) Fullback line (behind forwards — they guard the opponent's forwards, defense) (4) Halfback line (behind fullback and assist goalie.) Fouls: 1. The goalie taking more than two steps with the ball in his hands. 2. Touching the ball with the hand or any part of the arm between the wrist and shoulder. 3. Moving an opponent away with hands, arms or body. Rules: 1. When a foul takes place, the offending team is penalized by a penalty kick or a free kick. A penalty kick is awarded when a foul is committed in the penalty area by the defensive team. The offensive team		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	will take the penalty kick from the penalty mark with all the players except the goalie staying outside of the penalty area; a free kick is awarded for fouls committed outside the penalty area and is kicked from the spot of the foul. The opponents must be at least 10 yds. away until the ball is kicked. 2. If the ball is kicked over the sideline, it is put into play by the opposite team. A half back usually puts the ball into play from the sideline by a kick-in. 3. When the ball is kicked over the goal line but not through the goal by the offensive team, the goalie of the defensive team will kick the ball back into the game. The other team must remain 10 yds. away. 4. When the defensive team causes the ball to go over its own goal line, the offensive gets a corner kick. This kick is taken by the outside forward from the corner of the field closest to the ball when it went out-of-bounds.		
Given the acquisition of soccer skills and rules of play, the student will be able to play a modified soccer game.	The teacher will instruct the students of the following: 1. Soccer is a running and kicking game in which the ball is controlled by the foot. 2. The ball may not be touched with the hands or arms. 3. At the start of the game, the selection of goals or choice of kicking off is decided. 4. The center forward of the offensive or kicking team kicks the ball from the center circle towards a teammate. The ball must travel its circumference. 5. The opposition must remain outside the circle until the ball is touched. Then players on both teams may cross the center line and play the ball wherever it goes. 6. The object of the game is to move the ball down the field and into the opponents goal for a score. 7. The ball is moved by dribbling or passing. A defending player may intercept the ball		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	and thus reverse the field of play. For a diagram of the playing field and additional information refer to ERCAPEP index cards GS-7 under soccer. Teaching Suggestions: The teacher should include all the students in the modified soccer game — a regular game consists of 11 players but this number can be changed depending on the class. The game should be kept short as it is fatiguing. Positions should be change intermittently so all students can play all positions. Slower students should play defensive positions as it is less physically demanding. One team should wear pinnies so as to distinguish them for their opponents.		

PLS: No. 10 Learning Wise Use of Leisure Time — *LEVEL:* Intermediate & Junior High

OBJECTIVE: A. Understands the Selection and Location of Appropriate Activities

AIM: At School

CENTER OF INTEREST UNIT: Recreational Sports

SUBUNIT: Beginning Volleyball

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
Given the proper demonstration and necessary practice time, the student will be able to throw and catch the ball against the wall (overhand and underhand).	The teacher will give each student a volleyball and place them on a line approximately 2 feet from a wall. The student will face the wall and follow this progression: 1. Throw and catch the ball against the wall. a. overhand b. underhand c. fast pace 2. Move each student with a partner to a set-up volleyball net (6 ft. high) and go through part one.	Volleyball Sport Skills Chart; A.A.H.P.E.R. Basic Skills in Sports for Men and Women, Armbruster, Irwin, and Musker Publications; Mosby Co., 1967. **Dynamic Physical Education for Elementary School Children.** Dauer, Victor, Burgess Publications Co., 1969. Physical Education Programmed Activities for Grades K-6, DeSantis Gabriel and tester index cards.	Give each student 30 seconds to see how many times they can throw and catch the ball against the wall. Use overhand and underhand throw.
Given the rules and description of the game, the student will be able to play Newcomb.	At this time the lead-up game Newcomb can be introduced. This game will give the students the necessary rules and rotation procedures that they will need to play a volleyball game.		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	1. Two teams, one on each side of the 6 ft. net. Teams can consist of any number of players. 2. The player in the back right corner (facing the net) serves the ball by throwing it over the net. 3. Players on opposite side of the net try to catch the ball before it hits the ground. If unsuccessful, the opposing team is awarded a point. 4. If a player catches the ball, he either throws it back over the net or passes it to a teammate. Three such passes are permitted before the ball must be returned over the net. A player may not move after catching the ball. 5. The ball is thrown back and forth over the net until it hits the floor. 6. Each time a team scores a point it gets to serve again. 7. A team wins when it has scored a set number of points first, when it has scored the greatest number of points within a pre-arranged time period e.g., 10 minutes, or the team to reach 21 first wins. Encourage moving to catch the ball. Players have a tendency to stand still. After a point is scored, roll ball under net to the server. Rotate position after each point, so each player gets a chance to serve and play in all positions. Rotate clockwise. Teach the students to call out the score after each point.		
Given the proper demonstration and practice time, the student will be able to volley the ball with an overhand return.	Each student should have a volleyball and face the wall. 1. The student should throw the ball against the wall and upon return, volley it back and forth in this manner. a. Receive the ball about chest height using cupped hands with fingertips controlling. b. One foot is slightly ahead with the knees bent. c. The palms face forward and the elbows are up somewhat. d. The player should maneuver to a posi-		

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	tion directly under the ball, keeping his eyes on the ball. e. The return is made by making forcible contact with the hands and adding the thrust of the knees and body. When the students are ready — they can get a partner and with an overhand return, volley the ball back and forth over a net (5 ft. high). When a student progresses in skill, the net can be raised to 6'-5". Variation: The following drills can also be used to practice the volley: circle with the leader circle double line file and leader	Refer to **Dynamic Physical Education for Elementary School Children** by Victor Dauer, pp. 351 for description of drills.	
Given the proper demonstration and practice time, the student will be able to volley the ball with an underhand return.	The students should be taught that this really is definitely a second choice and is used to handle a ball below the waist. Players should use the overhand pass whenever possible. 1. The student's feet should be in an easy comfortable position with the knees slightly bent. 2. The hands are cupped with the palms up and the little fingers together. 3. The motion is a lifting motion from slightly bent elbows adding the power of the knees and the forward thrust of the hips. The ball must be clearly batted and not lofted.		**Wall Volley Test** Each student has 30 seconds to perform as many volleys (over and underhand) as they can. The students face the wall and the ball must be volleyed up to a line on the wall 6'-5" from the floor. No volley should be counted that is missed, held or is volleyed under the line.
Given the proper demonstration and practice time, the student will be able to do an underhand serve.	The student will stand in the back row of the volleyball court and practice serving over the net to a partner in the other court. The students could also serve to the wall. (Description is for a right-handed player). 1. Stand with the left foot forward and pointed toward the net. 2. The ball is held in the palm of the left hand with the arm across the body so the ball may be struck with the right hand moving straight forward. 3. The right hand forms a partial fist with the knuckles toward the ball. 4. Swing the right hand forward in an under-		The student has 3 tries to perform the underhand serve. The object of the test is to get the highest score. The student must stand on the backline of the volleyball court and serve to the other court. One point is awarded if the ball clears the net and hits on the front area, 2 for middle area and 3 for back area. A perfect score would be 9.

Behavioral Objective	Activities	Annotated Resource Materials	Evaluation
	handed motion striking the ball out of the left palm. 5. The ball is not tossed into the air but remains in contact with the left palm until struck by the right hand. 6. An alternate method is to use the cupped hand to strike the ball. Variation: When the serve is mastered by the students, Newcomb can be played using the underhand serve.		
Upon acquiring the skills of volleying, serving and playing Newcomb, the student will be able to play a modified volleyball game.	A modified volleyball game consists of the simple rules of Newcomb — adding the volley and serve to replace throwing and catching. As the students progress, additional rules could be added.	Refer to Dauer page 349 for the basic rules.	

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